Price setting in the South African services sector

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ABSTRACT

The way that companies price has a significant effect on ability of policy makers to actually effect real change at the consumer level. In particular the concept of price stickiness determines the lag and magnitude of effect that macroeconomic policies will have on prices and inflation, if any. A number of studies on price setting have been done internationally with the bulk of these focussing on the available micro data. There has been a recent trend towards survey based studies to understand the underlying reasons for price stickiness in firms and this paper follows that trend focusing on South African service firms.

The results show that firms follow a time dependent process for price reviews with the majority reviewing price once a year. The annual nature of these reviews is related primarily to the fact that wages contribute a much higher percentage than seen in other sectors and, by its nature, increases annually. This accounts for the higher stickiness seen in the services sector

Because firms are largely independent in their pricing behaviour, co-ordination failure remains the key cause of price stickiness followed by explicit and implicit contracts which stem from the focus on maintaining good customer relations.

KEYWORDS

Price reviews, price changes, price stickiness, South Africa, services

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Student Name: Jason Patchay Victor Naicker

Signature: _____

Date: _____

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This research is dedicated to my parents for always believing in me and being the only role models I have ever needed. To my mother, Irene Naicker for the love, patience and empathy you have instilled in me. To my father, Anba Naicker, for being the giant whose shoulders I will always stand on. To both of you for the support you have continuously given me despite myself. And finally thank you both for the humility you have given me through your example and for the belief that I can change the world for the better.

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1.1 Research Title

Price setting in the South African services sector

1.2 Research Problem

A firm's price setting behaviour is one of its key methods of communication with its customers and is a critical factor in the determination of its products and services (Amirault, Kwan, & Wilkinson, 2006).

Four aspects have to be considered:

1. The external factors influencing price decisions such as cost of inputs such as raw materials and labour. These costs are largely influenced by the monetary policy of the country's central reserve bank.

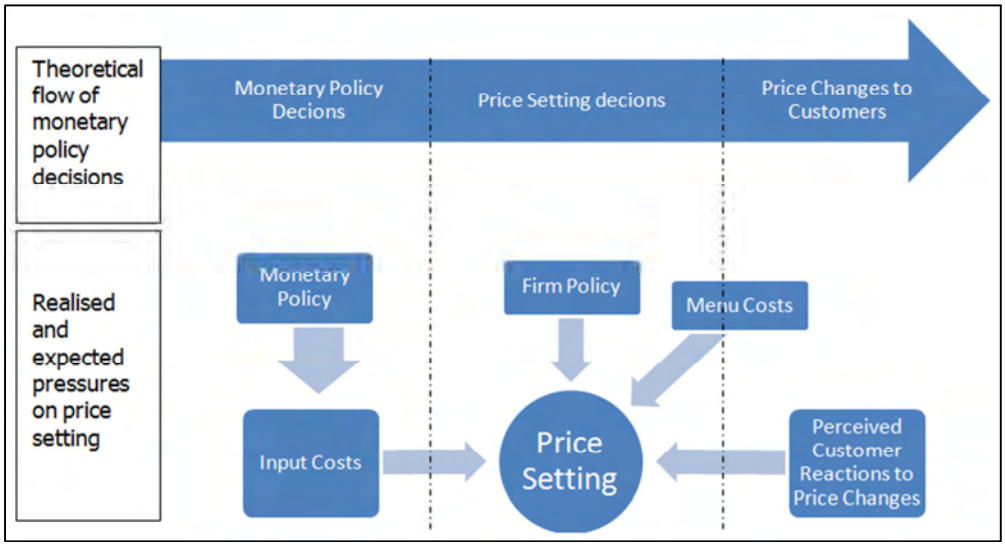
2. The expected reaction of customers to price changes or the price elasticity of the products or services offered by the firm. These have to be considered in terms of the perceived value of the offering as well as the relative price to similar products or services offered by competitors. In addition the goals of the firm have to be considered as some firms may prefer to drive volume through lower costs rather than balance costs to achieve higher overall margin. The determination of these affects can be considered information costs, or the costs inherent in determining what the effect of a price change would be (Greenslade & Parker, 2012)

3. The costs of changing prices. These can be the cost of relabeling and communicating the price changes to customers and are referred to as menu costs first discussed by Sheshinski and Weiss (Sheshinski & Weiss, 1977).

4. Firm policy. Most firms follow either a time-dependent or a state-dependent model of price setting (Greenslade & Parker, 2012) which will affect the timing of a price change.

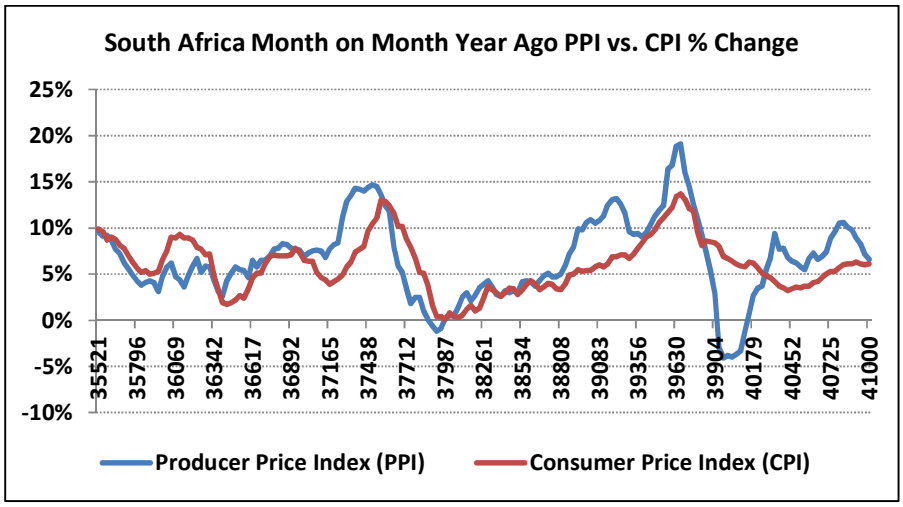
From a macroeconomic point of view it is important to understand how these pressures on price setting affect the aggregate change in prices to consumers. The table below shows the theoretical flow of monetary policy in influencing inflation as well as the aligned pressures on price setting faced by firms.

Figure 1: Theoretical effect of monetary policy vs. pressures on price setting



It is therefore expected that external inputs realised through monetary policy should have an effect on consumer prices and therefore inflation. However as shown by the chart below; the Consumer Price Index (CPI) does not consistently follow the Producer Price index (PPI) and shows a much lower volatility.

Figure 2: South African CPI vs. PPI (Statistics South Africa, 2012)



Thus the other pressures shown in Figure 1 have a large influence on firm's price setting decisions which affect the efficacy of monetary policy in influencing inflation. These other factors can be considered constraints on price adjustments faced by firms or 'nominal rigidities'. These account for the lagged response of prices to input costs as well as the difference in volatility between the two (Greenslade & Parker, 2012).

The services industry in South Africa makes up 66.7% of GDP and therefore has a large effect on inflation (Statistics South Africa, 2012). Previous studies also show that prices are stickier in the services industry than in retail and manufacturing (Alvares, et al., 2005; Greenslade & Parker, 2012; Fabiani, et al., 2006)

There have been a number of studies into the influence of nominal rigidities on price setting behaviour (Amirault, Kwan, & Wilkinson, 2006; Bils & Klenow, 2004; Fabiani, et al., 2006; Greenslade & Parker, 2012; Malik, Satti, & Saghir, 2010; Bils & Klenow, 2004; Alvares, et al., 2005) however, historically, most were done on a quantitative basis. This allows the verification of sticky prices and to some extent the degree of effect but does not disclose the reasons for the decisions made by the pricing managers of firms (defined as any employee that has executive power to decide prices). One such study was conducted in South Africa by Kenneth Creamer and Neil Rankin (2007) which used CPI micro data to show that price changes were not

homogenous. No qualitative studies into price setting behaviour and inherent nominal rigidities have been conducted on South African firms.

The services industry in South Africa makes up 66.7% of GDP and therefore has a large effect on inflation (Statistics South Africa, 2012). Previous studies also show that prices are stickier in the services industry than in retail and manufacturing (Alvares, et al., 2005; Creamer & Rankin, 2007; Greenslade & Parker, 2012; Fabiani, et al., 2006). This can largely be attributed to real wage rigidities inherent in the services industry due to the high contribution that labour has to the cost base of these firms (Alvares, Hernando, & Burriel, 2011). This can be further explained by the fact that wage reviews are mainly held on an annual basis which means that the large portion of input costs for a services firm change regularly and consistently.

Whilst wage rigidities may explain a large part of the inherent 'cost stickiness' for service firms it cannot explain the on-going pricing decisions made by company aiming to be competitive. To understand the factors which influence the list and transaction prices and explain overall sectoral stickiness a study asking questions to firms directly must be run.

1.3 Research Objectives

This research aims to examine the factors taken into consideration by the South African services industry in setting prices. It will attempt to determine the pricing methods taken by these firms and how (and if) they vary in frequency or methodology due to external economic shocks such as changes in monetary policy.

The key objectives are therefore:

1. Determine whether firms in the services industry follow state-dependent or time-dependent pricing review.

2. Uncover the key considerations taken into account when reviewing prices.

3. To determine whether price review are more dependent on external economic shocks or the competitive environment

4. To determine whether prices are sticky.

5. To determine what differentiators may account for increased levels of stickiness observed in this sector.

1.4 Research Aim

The aim of this research was to determine the method of price setting of firms in the South African services sector and whether they are sticky or flexible with regard to external economic shocks. This allows deeper understanding of the overall environment the firms compete in as well as the effect of monetary policy on regulating inflation.

2. Literature Review

2.1 Introduction

The theory in this section will provide a background to understanding the motivation for the proposed research and will cover three main areas; pricing methodologies; time and state-dependent pricing; and price stickiness. Pricing methodologies will examine how and why services firms establish their prices and what the key competitive considerations are. It is important to understand the theoretical goals as well as the inherent costs to achieve them before attempting to understand the reasons why these theoretical models may break down. Secondly price stickiness will examine the phenomenon whereby prices due not change when macro-economic shocks occur and how this affects the government's ability to target inflation via monetary policy. Finally the difference between time and state-dependent price setting will be discussed as this has a large impact on the price stickiness of the products or services offered by a firm.

2.2 Pricing Goals

When setting prices firms act towards their overall incentivised goals. It is important to understand these goals in the context of price stickiness as the optimal price for one firm may be relatively counterproductive to another firm in the same industry. These goals will also affect the frequency of reviews as well as the scale of environmental impact required before a firm changes its price.

Broadly speaking the price setting decision can be influenced by two major strategies:

- High volume/ Low margin: Here the firm is attempting to gain maximal market share whereby margin maximisation is secondary to maximal volumes. A firm following this strategy will likely hold off price changes in an attempt to maintain high market share. This is typical for the retail industry where low margins are experienced due to the high cost of stock holding and property (Poundstone, 2010).

- High Margin/ Low volume: This strategy is typical of the service industry where expertise is used as a differentiator to justify higher margins. Firms following this strategy will attempt to get maximal margin from each transaction due to the non-commoditised aspect of the offering (Poundstone, 2010)

Many service firms follow a hybrid of these, usually when they provide a product at low prices to drive volume (low margin) but follow up with services at a high margin. In this model the low margin high volume product is more of a penetration tool while the follow up services are the true profit drivers for the firm.

It is also important to note that traditionally in the retail and manufacturing sector market share has become a benchmark for executive performance thus there may be a disincentive to achieve optimal profit maximising price at the expense of market share.

2.3 Time and State-Dependent Pricing

Firms might decide to review their prices according to a number of factors however these can broadly be classified into two separate ideologies; time-dependent pricing or state dependent pricing.

Time dependent pricing refers to set time periods between which a firm institutes price reviews or changes. This does not mean that the periods are fixed but rather that the firm follows rules as to the frequency of price changes as per their price optimisation process (Greenslade & Parker, 2012). An example of this is that a firm is likely to increase the frequency of their reviews in a high inflationary environment with reviews becoming almost continuous under hyper-inflation (Fabiani, et al., 2006). Thus the actual time of price change is exogenous to the firm but the function of frequency of review to time is not (Greenslade & Parker, 2012).

State dependent pricing is dependent on market conditions. Thus a firm will keep prices steady until the current price is sufficiently misaligned with the optimal price for the current and foreseeable market conditions. Klenow and Kryvtsov (2008) and Wolman (2000) attribute this mainly to the fact that firms will not wish to change their

current prices before they reach a certain disparity to optimal prices lest the menu costs involved negate the positive effect of the change. However a number of recent papers have shown that this is not a major consideration for firms (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012)

Whilst some firms may only employ one of these methods at a time Fabiani *et al* (2006) and Greenslade & Parker (2012) found that the majority of firms do a combination of the two following time-dependent rules but switch to state-dependent for specific events. For services an example of a hybrid system would be that a firm holds periodical reviews and changes in the time-dependent model but would switch to a state-dependent model when there was a significant impact to wages or some other labour friction, as this would typically be the largest portion of their cost base.

2.4 Methods of Pricing

When deciding to set prices the majority of firms surveyed in previous international studies indicated that they followed a mark-up approach (Fabiani, et al., 2006; Greenslade & Parker, 2010). This is where firms evaluate the marginal cost of producing a product or service and apply a percentage mark-up to come to the price the customer is charged.

This percentage can be fixed, whether at a company, division or product level. However a large number of firms have a variable mark-up percentage which is changed depending either on the quantities sold or the relationship with the customer. Greenslade and Parker (2012) mention that mark-up pricing (especially that with a variable mark-up percentage) is indicative of low competition as it allows firms to extract maximum value from customers through price discrimination.

As competition increases firms move closer to a marginal costing approach where the price customers are charged is equal to the marginal cost of producing the product (under perfect competition)

2.5 Price Stickiness

Price stickiness is an economic concept whereby prices do not change as rapidly as might be expected due to external economic shocks whether from the macro or micro-competitive environment. According to Wolman the acceptance of sticky prices is one of the most pervasive arguments for the importance of monetary policy since if the nominal prices of goods or services do not change with economic conditions then monetary policy is necessary to influence economic activity (Wolman, 2000).

Calvo and Taylor suggest that a large portion of price stickiness can be explained by the majority of firm's reliance on time dependent pricing (Calvo, 1983; Taylor, 1980). This would inherently affect the change of prices to not correlate immediately with external shocks. The Calvo and Taylor models employed in future studies describe that due to successive staggered price changes by firms following time-dependent pricing leads to the lag in price change. However Bils and Klenow (2004) showed through empirical evidence that inflation movements are too volatile to be accounted for by this and that price changes are more frequent than had been described in earlier models. In addition Greenslade and Parker found that the majority of firms change their prices as often as they reviewed them but were unlikely to change them without review indicating a general price setting approach more dependent on review of various pressures on price rather than a rigid conformity to a set time-dependent process (Greenslade & Parker, 2012).

Furthermore price stickiness has been found to be heterogeneous across sectors and industries (Alvares, et al., 2005; Creamer & Rankin, 2007; Fabiani, et al., 2006; Greenslade & Parker, 2010; Bils & Klenow, 2004). Overall it seems that the highest level of stickiness is found in the services sector followed by manufacturing and retail in that order. To a large extent this can likely be explained by the target gross margins across the industries where the highest target gross margins are seen in the services sector followed by manufacturing and retail respectively (Steiner, 1993). Thus the industries with higher margin pressures would be more incentivised to review price more often.

However price stickiness is observed to a significant degree across all sectors indicating that there are constraints faced by firms wishing to change their pricing. Blinder *et al* proposed a number of theories as to why firms may not revise prices at a

specific time to maximise profit which have been used in subsequent studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012; Alvares, et al., 2005). These are listed below:

- Co-ordination Failure: This important aspect of competition and non-collusive behaviour implies that since firms cannot co-ordinate their prices for the financial benefit of the entire industry (at the cost of consumers), no firm will change its price at the cost of starting a price war. This behaviour leads to the phenomenon of price leaders and price followers, associations that are generally dependent on the firms strength within its industry

- Temporary Shocks: This is especially prevalent in industries where commodities contribute heavily to the cost base. Due to the volatility of input costs which may revert in a short time period it may not be worth reviewing prices due to shocks as they will not remain relevant either from a margin or consumer value point of view.

- Cost Based Pricing: Implied by the above and an accepted consideration for firms wishing to remain competitive, prices will not be reviewed until costs are believed to have changed significantly that current prices will not generate sufficient margin for the firm to remain financially viable, now and in the future.

- Explicit and Implicit Contracts: Firms are unable to change agreed upon prices with customers within a given period until the contract is reviewed and are unwilling to change non (explicit) contracted prices to customers as the price change may negatively affect demand. Fabiani *et al* also list price thresholds which are a form of implicit contract (Fabiani, et al., 2006). In addition the maintenance of both of these contract forms is seen as very important in maintaining long term relations with important customers (Anderson & Simester, 2010).

- Menu Costs: The actual costs involved with researching the effect of price changes and implementing them, menu costs were previously believed a key driver for price stickiness however recent studies have shown that they have little influence on price setter's decisions (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012)

While this list is not exhaustive it highlights the key theories attributed with causing price stickiness. The following table shows the relative importance of these theories as described in the relevant surveys

Table 1: Ranking in terms of importance of theories on price stickiness to price setters from previous studies

	Fabiani, et al	Greenslade & Parker	Amirault, Kwan, & Wilkinson	Average
Explicit Contracts	1	2	1	1.33
Co-ordination Failure	2	1	2	1.67
Implicit Contracts	4	3	3	3.33
Menu Costs	3	4	4	3.67

Source: (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012)

While the above table only shows data for theories tested across all three studies it highlights that explicit contracts and an co-ordination failure are described as the most important factors influencing pricing decisions which may lead to price stickiness while implicit contracts and menu costs the least so. The inclusion of both implicit and explicit contracts across all three studies speaks about the importance of not antagonising customers through breaking a legal or implied agreement for prices to remain at a certain level (Anderson & Simester, 2010).

The importance given to co-ordination failure can be seen as a function of the more personal nature of services whether to a company or an individual. Especially regarding professional services, these transactions are often highly tailored to the customer and prices discounted to obtain additional work or move the client to a continuous one.

A comparison of these rankings to South African data may will highlight the differences (or similarities) between South African firms and those from developed nations in their pricing decisions and therefore on the varying efficacy of monetary policy in adjusting for sticky prices.

An interesting note is that cost based pricing was ranked the most important factor in the Fabiani *et al* and Amirault, Kwan and Wilkinson studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006) (However it was excluded from this table as it did not feature in the Greenslade and Parker (2012)). In addition cost based pricing

can be considered a pervasive feature which influences the other factors. What this does highlight is the importance of the cost structure of the firm on price stickiness. As has already been discussed, the key differentiator for services firms in contrast manufacturing and retail is the high labour cost contribution. The labour intensity of a firm impacts the frequency of price review inversely due to the low frequency of wage reviews (Alvares, Hernando, & Burriel, 2011). Thus the impact of wages on the cost base must be considered when analysing service companies.

2.6 Wage Rigidities

Wage rigidity is an important economic which describes that firms find it hard to reduce wages due to reasons such as labour agreements or the fear of lost productivity (Nickell, Stephen; Quintini, Glenda;, 2001). Thus wages are considered downwardly rigid. This also ties in to unemployment especially over periods of macroeconomic shock as companies faced with lagging demand will choose to rather dismiss workers (Christoffel & Linzert, 2010).

This phenomenon is of particular importance to service firms due to the high contribution of wages to their cost base. In particular if wages are downwardly rigid but upwardly mobile firms in this sector would find it very hard to reduce prices without significant margin losses. As described by Taylor (1999) there has been an increasing amount of research done on the subject of wage rigidities especially with regards to the output of firms as well as unemployment and inflation. However very little research could be found on the effect of wage rigidities on price stickiness especially concerning services.

3. Research Propositions

In line with previous qualitative research in other regions this study will attempt to uncover the influences on price setting in the South African services sector. The outcomes will determine the price stickiness or flexibility of these firms and the factors that influence them. This will also expose the relative importance of these factors in the frequency and scale of price changes. The influence of wage rigidities will also be examined to determine the effect these have on price stickiness within the sector.

This can be restated in the following propositions based in the context of the South African service sector:

1. Prices are sticky.

2. Firms follow a time dependent process for price review.

3. Explicit contracts and Co-ordination failure are the major causes for price stickiness.

4. Menu costs have a small comparative influence on pricing decisions.

5. Wage rigidities account for the noted high relative price stickiness of service firms.

4. Research Methodology

4.1 Introduction

This section describes the proposed research methodology, the universe size as well as the sample used to represent it and the data to be collected including the method of its collection. Finally it describes the proposed analysis of this data and any possible limitations which can be further investigated in future studies.

4.2 Research Design and Rationale

This research made use of a quantitative survey which is best used to observe the behaviour of respondents in a sample (Zikmund, Babin, Carr, & Griffin, 2009). As has been described there have been a number of studies run on empirical data around the world including one on South African micro data by Creamer & Rankin (2007). No investigation had been done on South African service firms to determine the methods of price reviews and changes and their relation to the overall stickiness of the sector. The nominal rigidities that lead to this stickiness can only be determined, and their effect on stickiness analysed, by gathering information directly from price setters in firms (Greenslade & Parker, 2012).

The structured survey generated data on the frequencies and methods of price reviews and changes and how they impact stickiness of the firms surveyed. Thus the analysis of this data was descriptive in nature which is best used to provide an accurate representation of persons, events and situations (Saunders & Lewis, 2012). The information gathered directly from firms allows the understanding of the impact of nominal rigidities on the price stickiness of the services sector as described by Creamer and Rankin (2007)and Greenslade and Parker (2012). The data generated and the research overall was therefore quantitative in nature

4.3 Unit of Analysis

Responses to the quantitative questionnaire were gathered from individuals in firms in the South African services sector who were responsible for the review and change of products and services produced by their company. They can broadly be considered pricing managers. These pricing managers were therefore the unit of analysis for the study.

4.4 Universe

The universe consists of all registered companies in South Africa which operate in the services sector. As a number of firms offer a mix of products and services firms will be selected by industry with the industries considered falling into the broad definition of the services sector. These firms will be represented by their pricing managers.

According to the world trade organisation (2012) these are:

- Business and professional services
- Communication services
- Construction and related services
- Distribution services
- Education services
- Energy Services
- Environmental services
- Financial services
- Health and social services
- Tourism services
- Transport services

However only firms which can act freely to set prices in an attempt to maximise profit will be considered as the constraints on price setting are very different for Non Growth Organisations (NGO's) and firms which operate in a regulated environment. Thus firms which fall into these categories will be specifically excluded from this study.

4.5 Sampling Method and Size

The descriptive nature of the data collected required that selected individuals were recognised as the owners of the price setting and review process within their firms. To enable a representative sample pricing managers were selected from across the industries described above. As there was no easily obtainable population list of pricing managers in South Africa a probabilistic sampling method cannot be used. Therefore judgemental sampling was used to select individuals at firms who had high level responsibility for pricing decisions. This is a non-probabilistic sampling method which is best used to select a sample to represent a population with a specific profile. (Saunders & Lewis, 2012).

Initially the target number of responses was 50 however after contacting 334 individuals only 41 responses were received, 34 declined due to confidentiality or company policy reasons and 259 did not respond. The response rate was therefore 12.3%. In addition, during the data cleaning process 8 responses were eliminated as due to not completing a large portion of the survey. Thus the final sample size was 33 which was much smaller than that used for previous international studies of the same nature (Amirault, Kwan, & Wilkinson, 2006; Greenslade & Parker, 2010). However the timeframe for collection was much shorter for this study.

The key reasons for the low response rate as mentioned by some targeted respondents as well as insight gathered during the targeting process were:

- **The confidential nature of pricing:** even though confidentiality was assured and the questionnaire did not seek to uncover the deep micro factors behind price setting, many firms were unwilling to engage on this topic.

- **Company policy:** a number of major listed firms were unwilling to participate as they had policies in place which prevented them in engaging in any form or research regardless of the topic.

- **Questionnaire length and complexity:** A number of respondents who started the questionnaire did not complete it. When asked for feedback the majority stated that the questionnaire was too long or the complexity was such that they felt they could not provide accurate answers which represented their company.

- **Specificity of sample:** Because this research targeted the key price decision maker each firm generally had one person that could be targeted. This is also related to the complexity of the questionnaire as described above and led to sampling limitations.

4.6 Research Instrument and Data Collection

Data was collected by using a structured questionnaire divided into three sections in line with those used by Amirault, Kwan and Wilkinson (2006) and using a combination of their questions and those posed by Greenslade and Parker (2012). This will allow for comparisons to be drawn between the information presented in those studies and this one. Initially, face to face interviews were to be used however the limited time for data collection and the required sample size made this impractical.

Thus an online survey was used to capture responses after respondents were contacted telephonically or via email. This had the benefit of automatically capturing data electronically and allowing respondents to complete the questionnaire in their own time. The disadvantage was the inability to guide respondents through the questionnaire, ensure completion or pick up additional insight from them.

The sections of the survey covered the following information:

Section A: The questions in this section covered the structure of the firm and the industry it operates in. It also investigated the strength of the firm within the industry in terms of their distribution, competition and price setting behaviour.

Section B: This section examined how the firm reviews and changes prices in terms of their general process as well as the cost base which influences pricing decisions

Section B: This section looks specifically at the possible reasons for a delay in price changes due to nominal rigidities

4.7 Data cleaning and analysis

Once all responses were collected, data was manually cleaned to remove any duplicate entries by respondents (who attempted to pause the survey and resume at a later date) and entries by respondents who did not complete the survey. As discussed above this took the total number of viable responses down to 33 from 41.

The responses were then coded to allow for greater ease of summation and analysis (Saunders & Lewis, 2012). The data consisted of both numerical and categorical data. Numerical data was analysed by frequency of response while categorical data was ordered by strength of response and ranked by combined 'very strong' and 'fairly strong' responses. This allowed key nominal rigidities and key pricing considerations to emerge and to be compared to results presented by Amirault, Kwan and Wilkinson (2006) Fabiani *et al* (2006) and Greenslade and Parker (2012).

The descriptive information produced showed the influence of particular nominal rigidities in the South African services sector as well as their relationship to the classification and price setting process of the firms which. The relative rankings of these based on the frequency of strong responses allowed the most important factors to be clearly highlighted as well as uncover those with minimal impact.

4.8 Research Limitations

Due to the nature and context of this study a number of limitations emerged:

- Only registered companies in the formal services sector fell into the sample. Thus the price setting of informal 'firms' which sell products and services to the bulk of the South African population and account for a large portion of true inflation to this group was not investigated.

- In many services firms the power of pricing decisions for transactions is dispersed throughout the organisation. Thus price review and changes affecting the list price may have masked the information on transactional pricing at the client facing level.

- The sample size of 33 pricing managers was much smaller than the population size and due to the many industries contained in this sector it was not possible to segment the data at this level and remain statistically valid.

- It is possible that, due to the confidential nature of pricing, responses may not have been entirely accurate if they felt there was a possibility this information could be given to their competitors.

5. Results

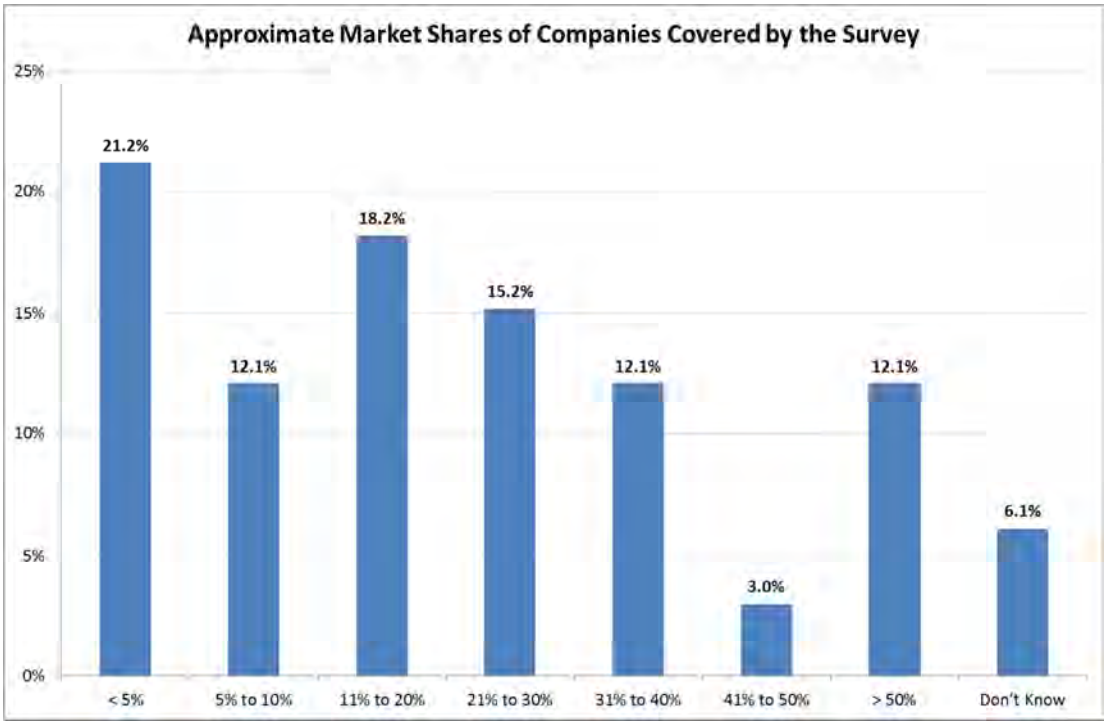
5.1 Introduction

This section presents the results generated from the survey and provides an analysis of the data therein. Results have been grouped into themes around key desirable outcomes to be used in the following section discussing the results in line with the previously presented propositions.

A total of 33 company responses were used and results presented are descriptive tables and charts presenting frequency of responses. Only relevant information has been presented and the full questionnaire can be found in Appendix A

5.2 Sample Characteristics

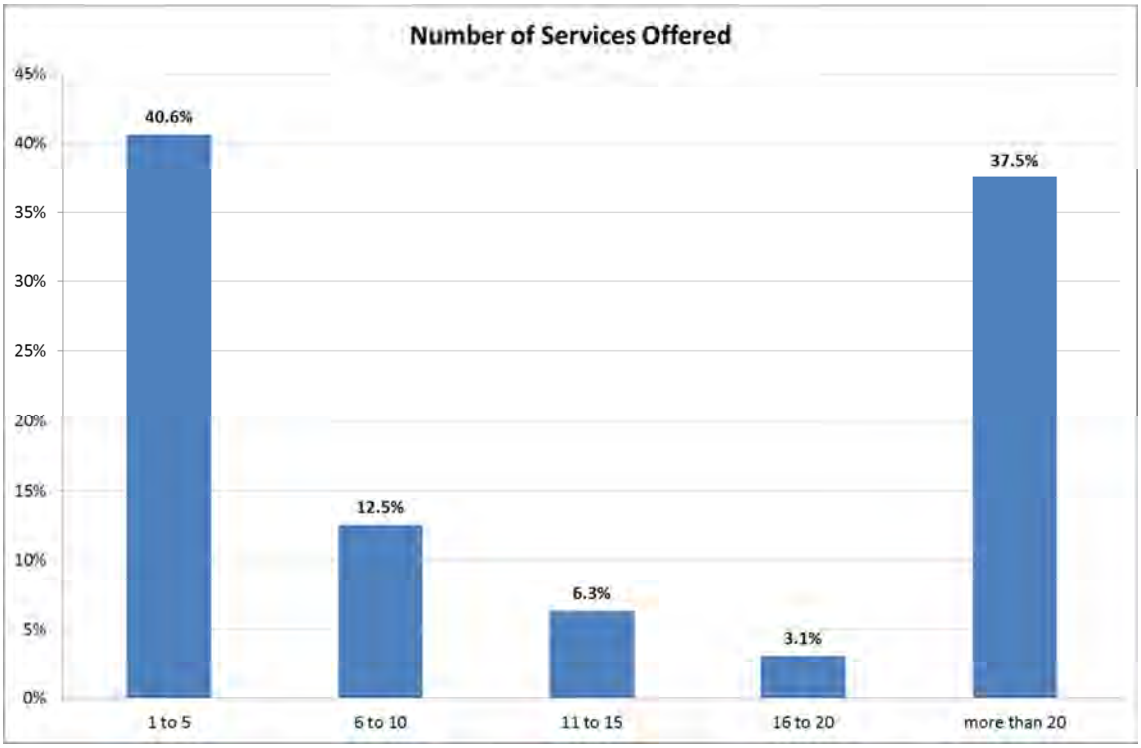
Figure 3: Approximate Market Share of Companies



The stated market shares of companies covered by the survey covers a broad range with the majority falling between 0 and 40% (69%). Most respondents stated that

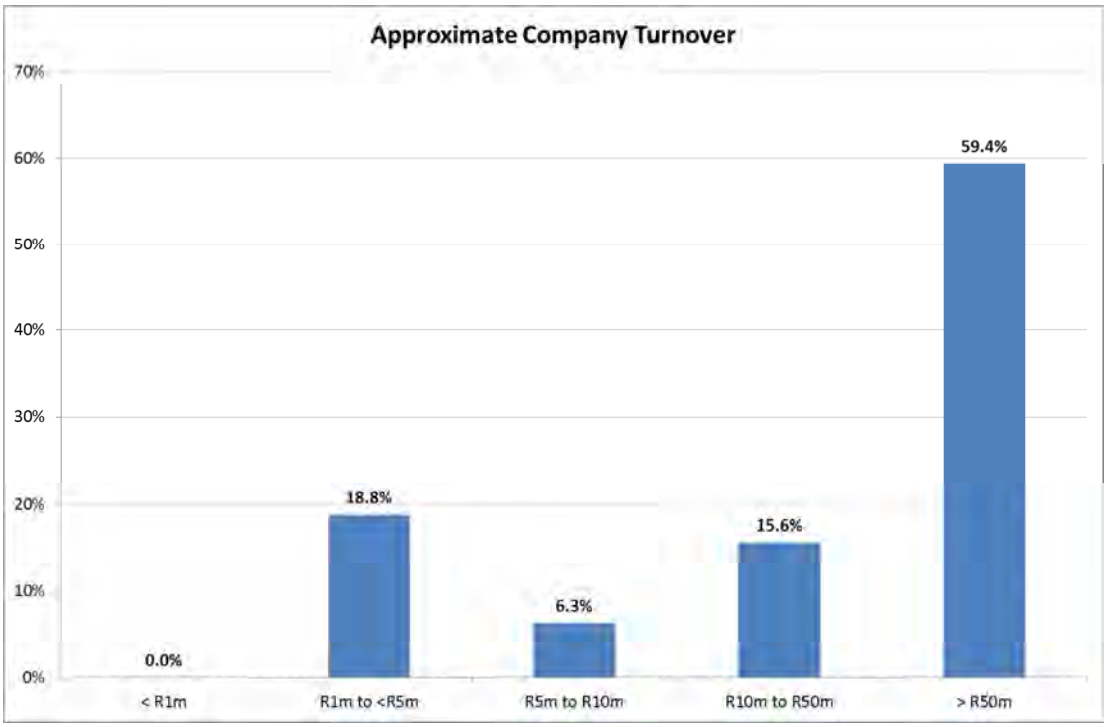
their approximate market share was below 5% (21%) with only 12% stating an approximate market share of greater than 50%.

Figure 4: Number of Services Offered



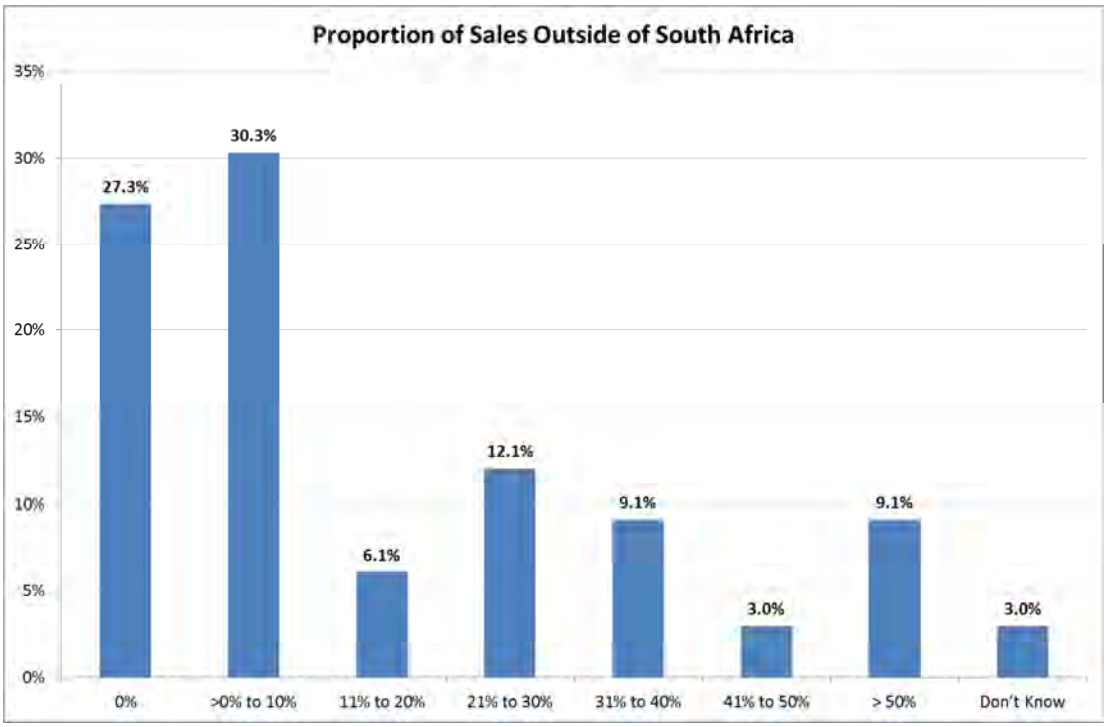
The number of services offered by services is polarised with equivalent numbers of companies offering less than five distinct services and more than twenty distinct services. The percentage of companies whose service offerings fall out of these bands is only 22%.

Figure 5: Approximate Company Turnover



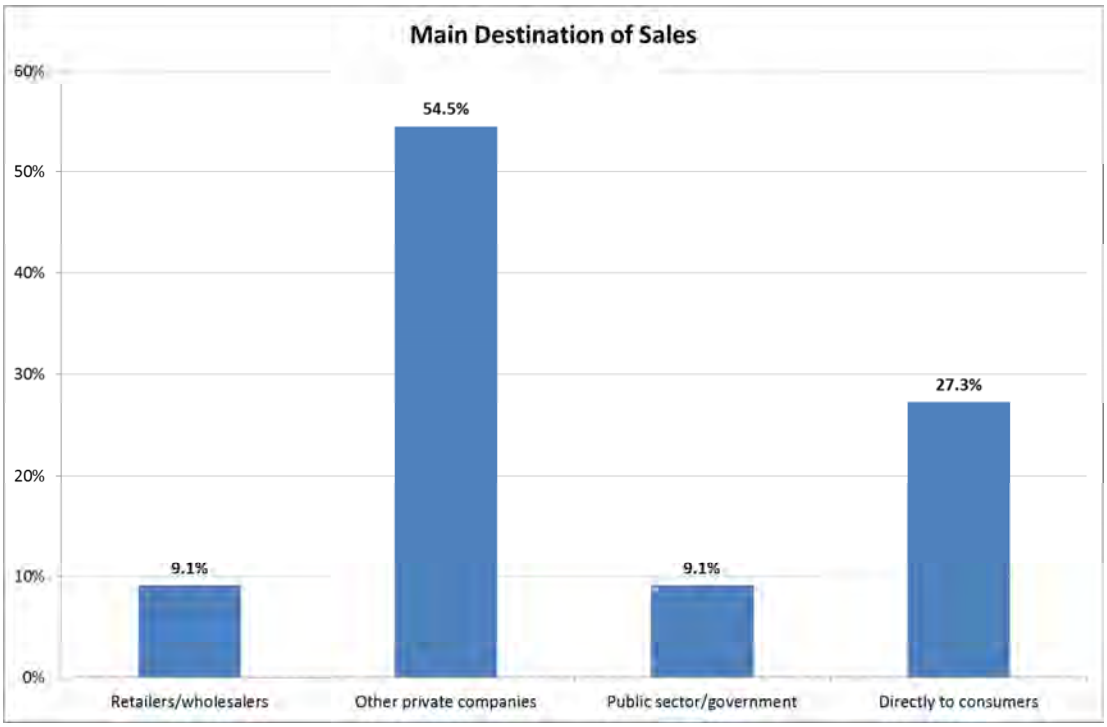
The majority of companies (59%) show an approximate turnover of more than fifty million rand indicating that the majority of the sample was made up of large companies with significant contributions to GDP. No companies indicated an approximate turnover of less than one million

Figure 6: Proportion of Sales Outside of South Africa



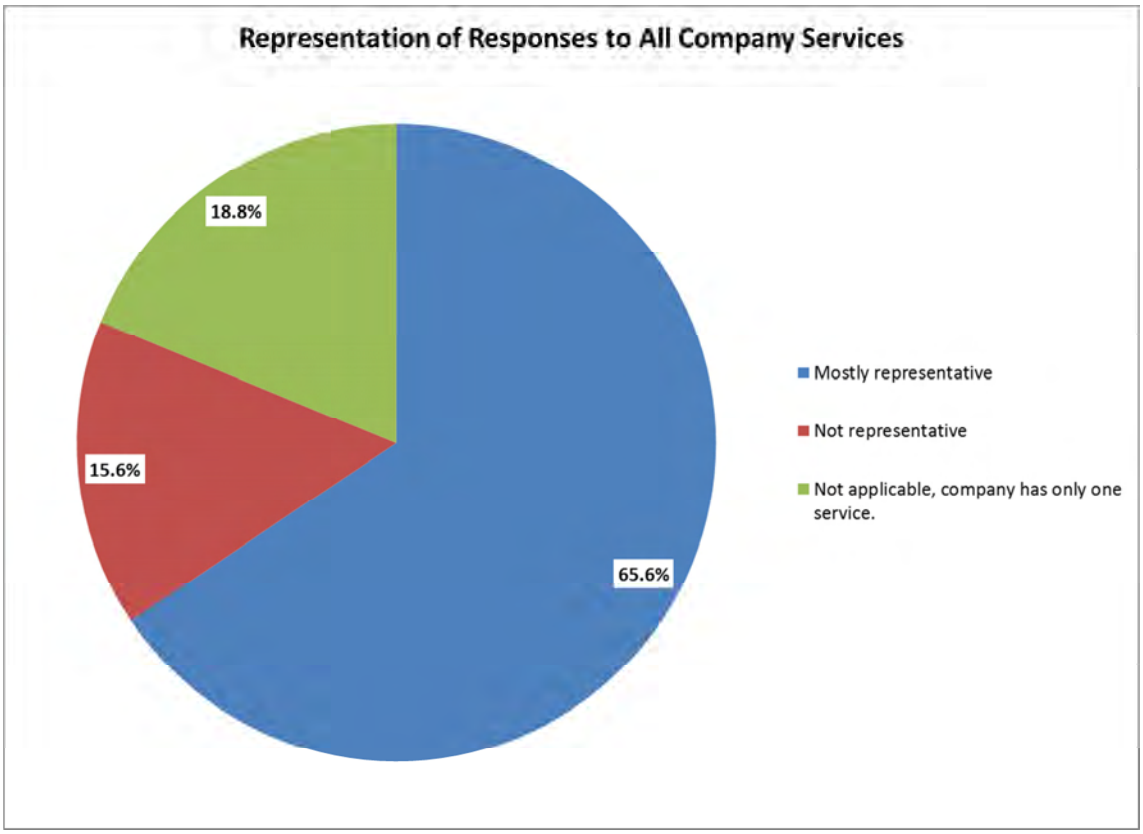
The majority of companies (88%) generate the bulk of their revenue from customers in South Africa with 27% servicing South African customers exclusively. Only 9% of companies generate the majority of revenue internationally.

Figure 7: Main Destination of Sales



54% of companies surveyed engage in sales to other private companies for their main source of revenue. This is typical of the services sector where a large proportion of companies fall into the professional services category. 27% of companies have direct sales to consumers as the majority source of their income.

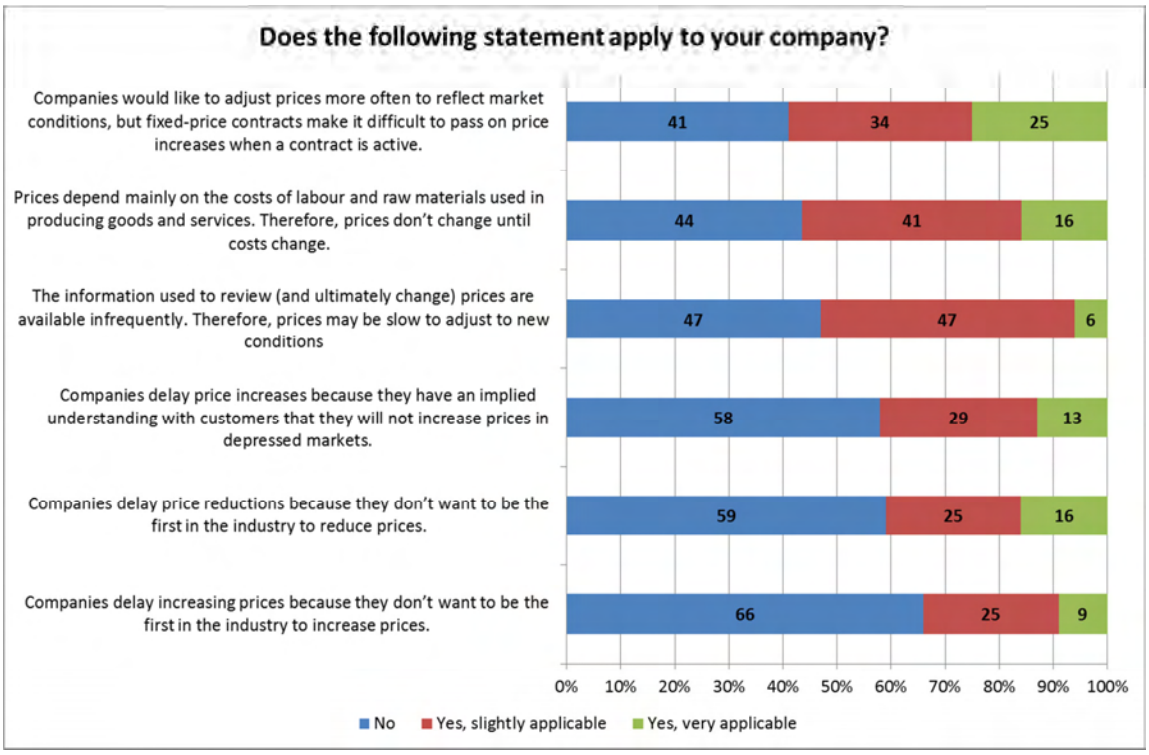
Figure 8: Representation of Responses to All Company Services



The majority of companies (84%) felt that their responses were relevant to all of their services with 66% stating that they had other services and that the responses covered these as well. Only 16% felt that their responses were not representative of their total offering.

5.3 Price Stickiness

Figure 9: Applicability of Statements Regarding Reasons for Price Stickiness



59% of companies felt that fixed-price contracts had a definite negative impact on the ability to change prices (positively). 25% felt this was a very applicable to their relationships with customers while 34% felt it was slightly applicable.

The impact of changing costs on changing prices was seen as significant by 57% of companies and negligible by 44%. 16% felt that this was very applicable to their circumstances while 41% felt it was slighlty applicable.

Responses on the infrequent access to information were polarised with equal numbers of companies responding positively and negatively to infrequent access to information slowing the adjustment of prices. A small percentage (6%) felt strongly that this was the case.

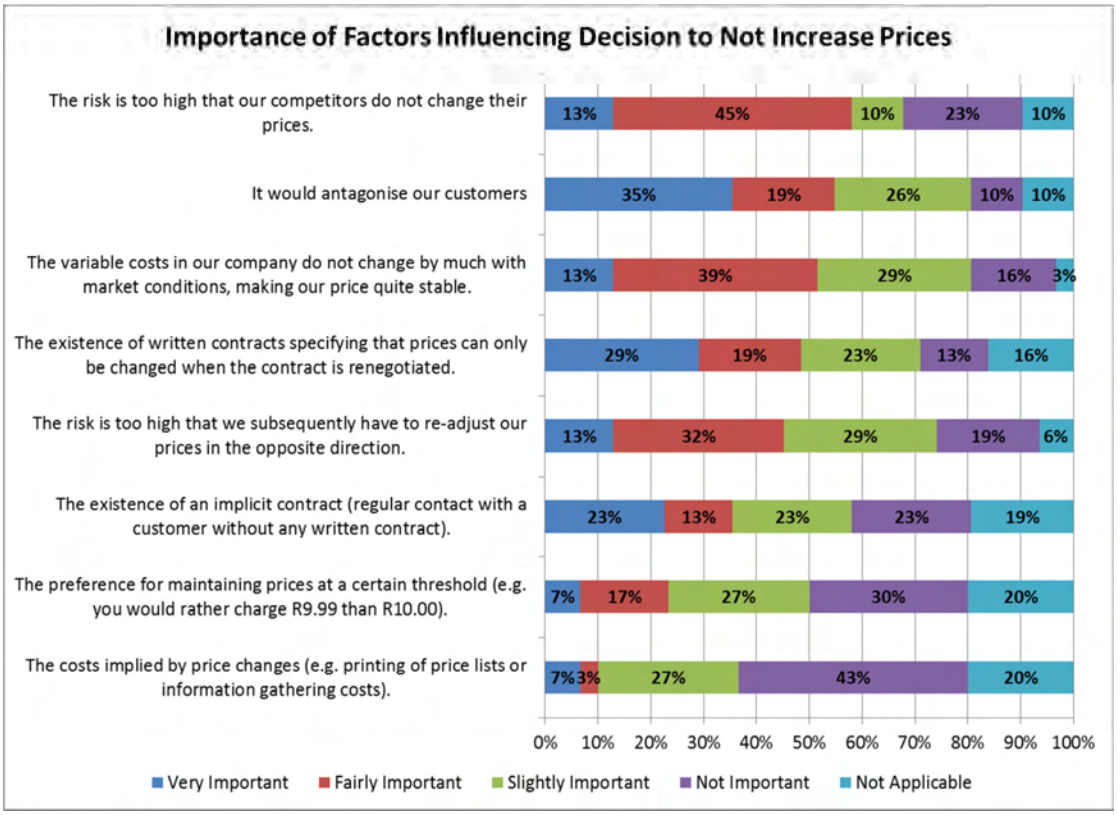
When asked whether: "Companies delay price reductions because they don't want to be the first in the industry to reduce prices.", the majority (59%) replied 'no'. Only 16% felt that it was 'very applicable with 25% replying that it was 'slightly applicable'.

The majority of companies (66%) felt that fear of being the first to increase prices had no impact on this decision. 34% answered yes but only 9% answered that this was very applicable with 25% stating that it was slightly applicable to them.

The majority of companies (58%) did not see depressed markets as affecting their a ability to change prices regarding the customers perception of an implied understanding. 42% did feel that their was an implied understanding that they would not raise prices in this situation with only 13% seeing this as very applicable.

Overall the most importanct factors were fixed price contracts (59% applicable) and that prices don't change until costs of labour and raw material change (57% applicable) implying that these costs did not change frequently.

Figure 10: Importance of Factors Influencing Decisions to Not Increase Prices

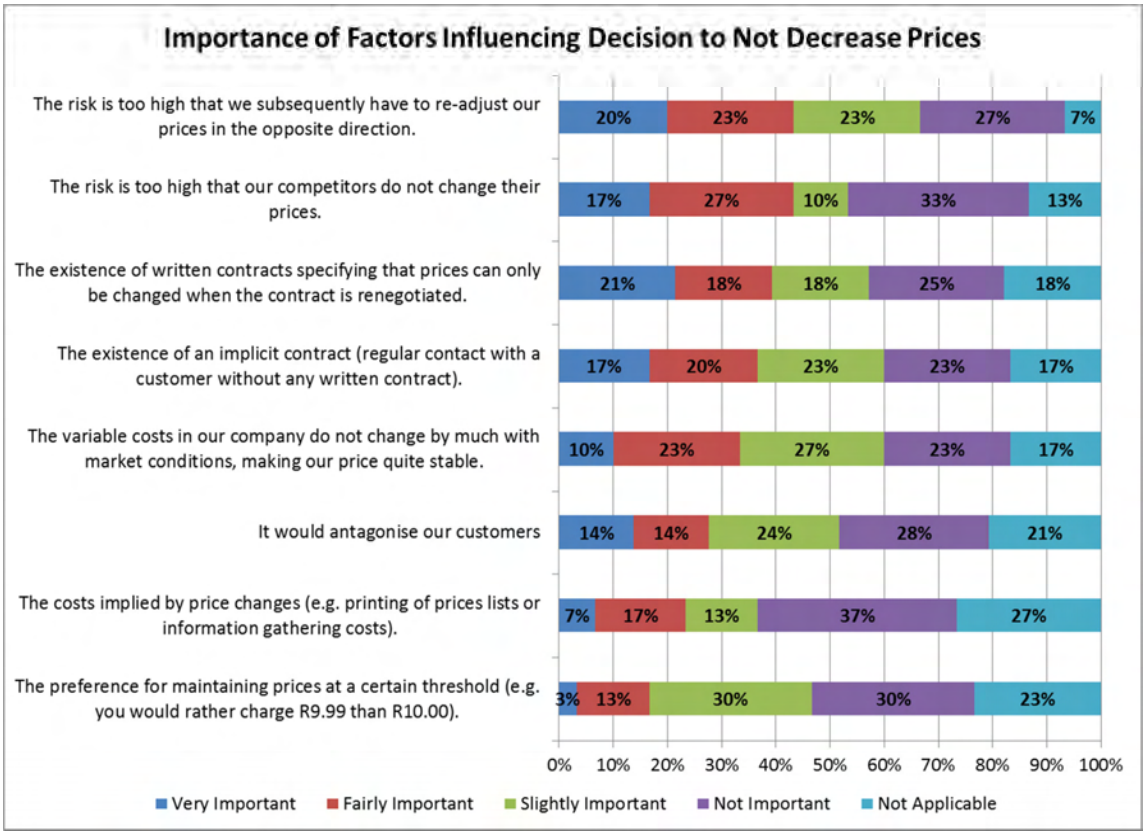


Ranked by cumulative frequencies of 'very important' and 'fairly important' most companies (58% importance) decide not to increase prices due to the risk that competitors do not

change theirs. The second ranked reason to not increase prices was that it would antagonise customers (54% importance). However this had the highest frequency of 'very important responses with 35%. The unimportance of variable costs was third with 52% importance and written contracts fourth with 48% importance.

Ranking by the 'very important' response frequency the most important reasons to not increase price were due to customer relationships. Not antagonising customers was first (35%) folled by written contracts (29%) and implicit contracts (23%)

Figure 11: Importance of Factors Influencing Decisions to Not Decrease Prices



Regarding reasons to not decrease prices; companies felt that there was a danger in that they may have to re-adjust prices in the opposite direction (43% importance). This was followed by the risk that competitors do not adjust their prices (43% importance). The next two most important reasons are regarding customer relations with the existence of written contracts third (39% importance) and implicit contracts fourth (37%). In fifth the static nature of variable costs had 33% importance.

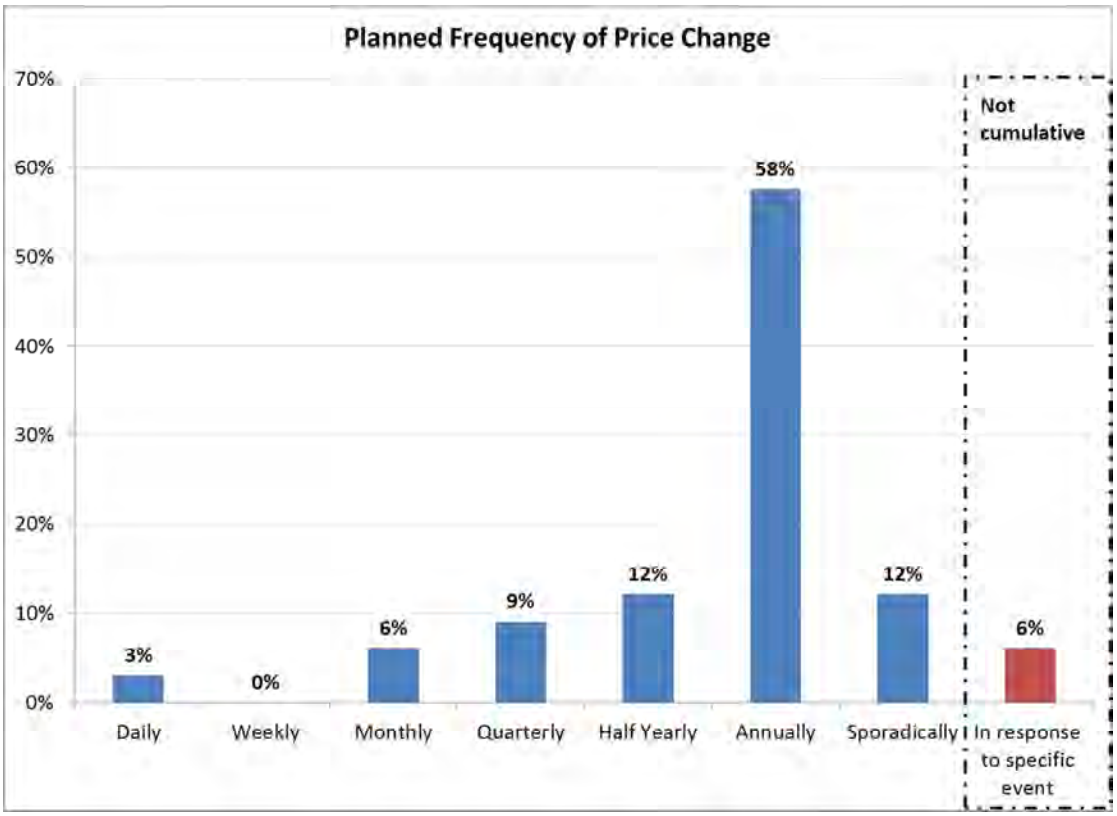
Re-ranking by 'very important' response has no effect on the top four rankings other than the existence of written contracts becoming the highest ranked (21%)

Figure 12: Reasons for Slow Price Adjustments

When asked for non-cumulative reasons for slow price adjustments 71% of companies indicated that more frequent changes would disturb customer relationships. The response with the second highest frequency was that the factors influencing price were too static to justify more frequent changes (61%). All other responses had very low frequencies with the cost of changing prices only seen as significant by 23% of companies.

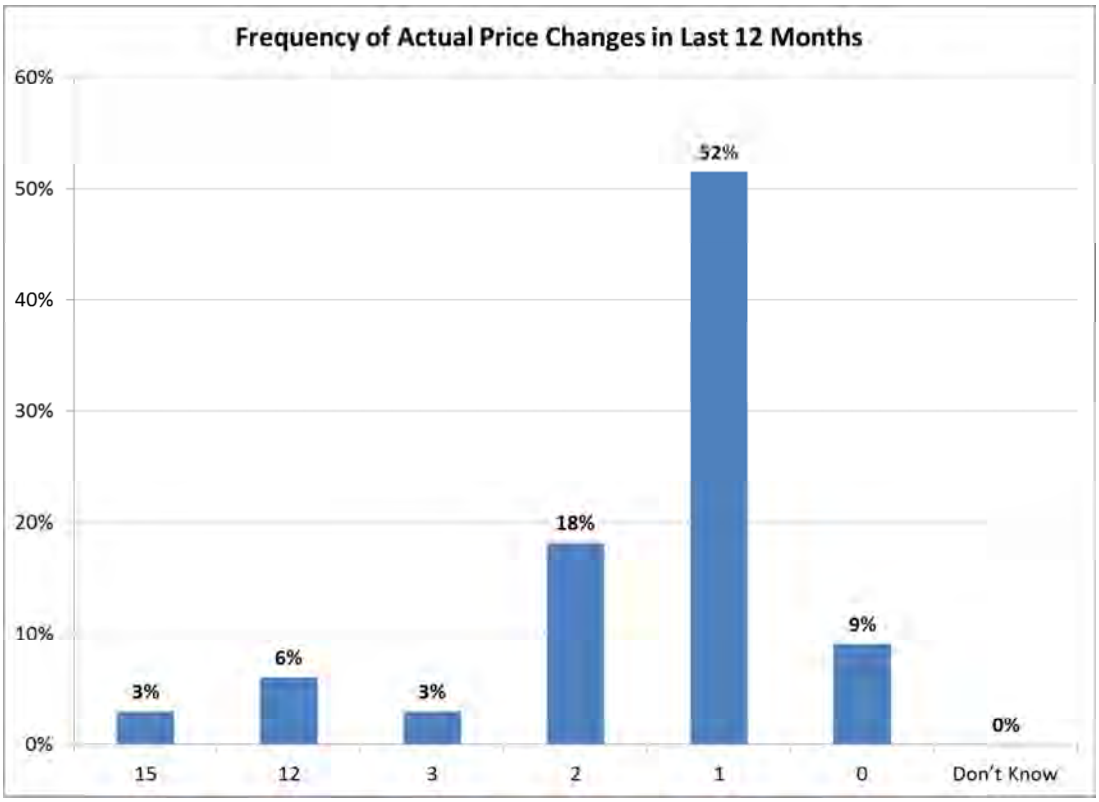
5.4 Frequency of Reviews and Adjustments

Figure 13: Planned Frequency of Price Change



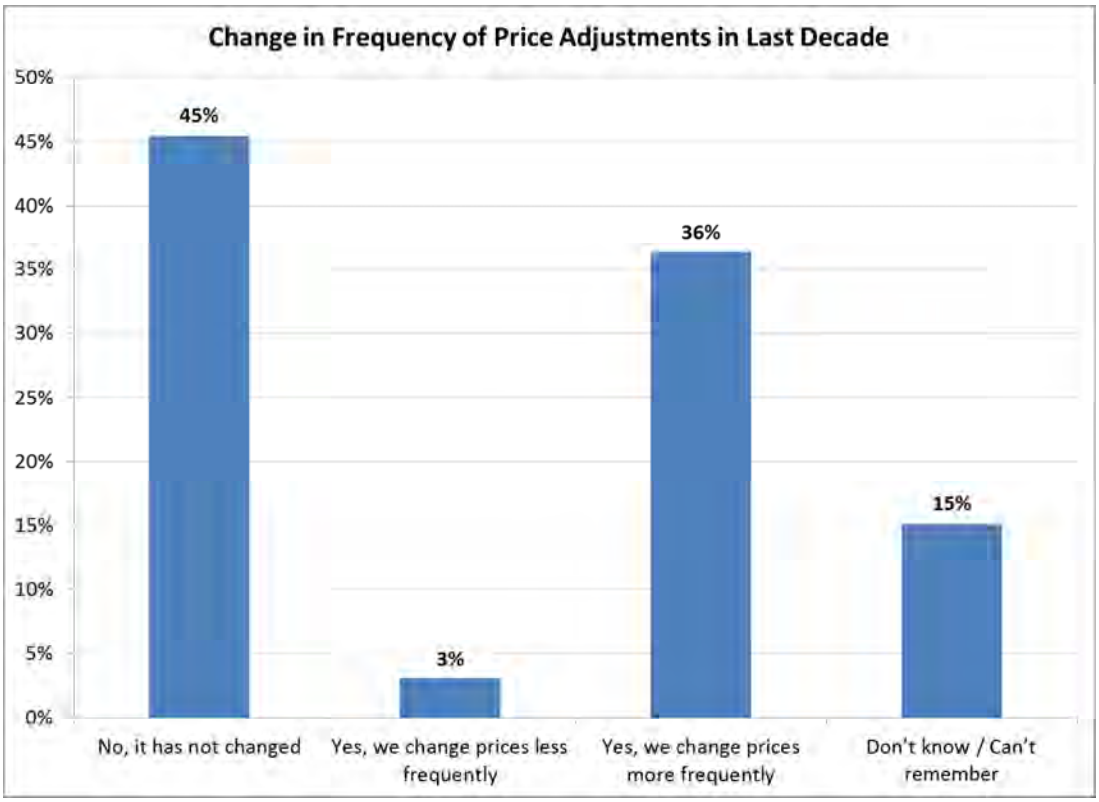
The majority of companies (58%) only review their prices once a year with the overall weighting tending towards less frequent price reviews. Only 6% of companies state that they review their prices in response to a specific event in addition to their normal price reviews.

Figure 14: Frequency of Actual Price Changes in Last 12 Months



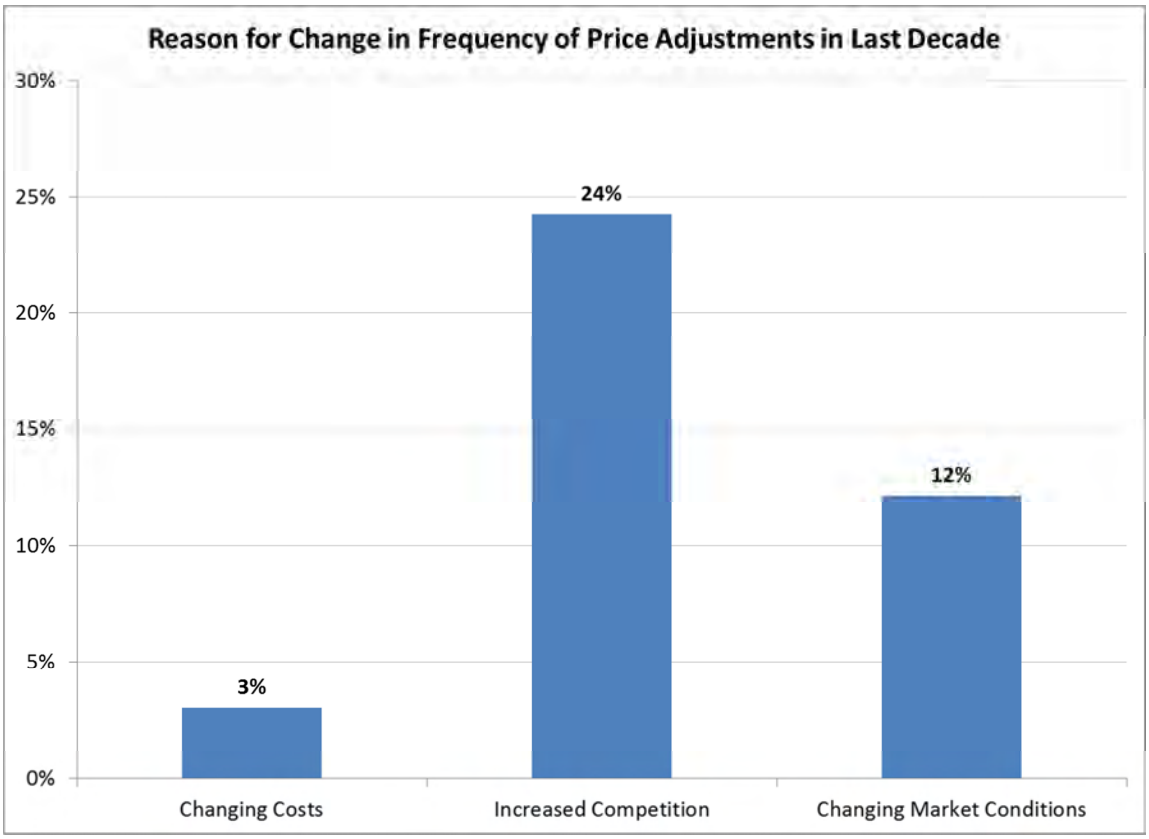
A lower proportion of companies (52%) actually changed their prices once in the last year as opposed to those who review their prices once a year (58%). On average companies changed their prices 2.4 times a year or once every 5 months.

Figure 15: Change in Frequency of Price Adjustments in Last Decade



45% of companies stated that the frequency of their price changes have stayed the same in the last year while 36% said that the frequency had increases. Only 3% saw less frequent price changes.

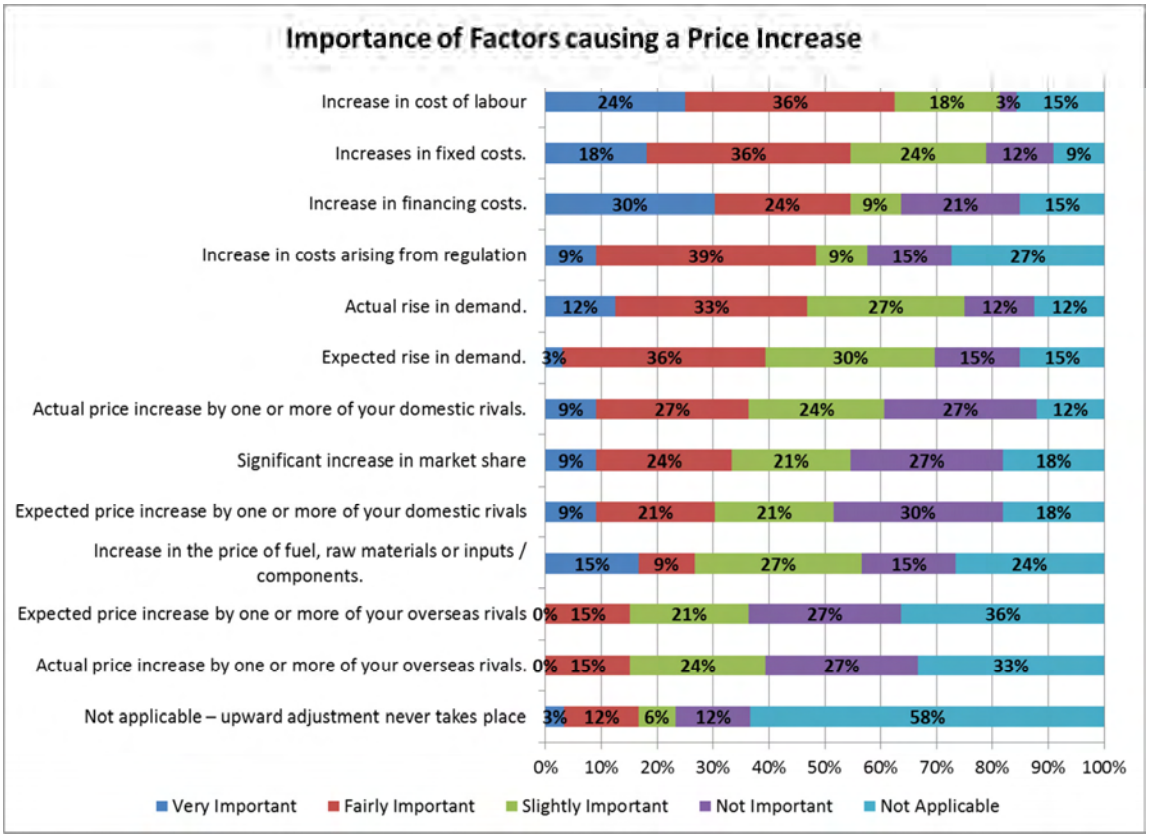
Figure 16: Reason for Change in Frequency of Price Adjustments in Last Decade



Of companies who saw a change in frequency of price changes in the last decade, the majority (24%) said that it was due to increased competition.

5.5 Reasons for Price Reviews and Adjustments

Figure 17: Importance of Factors Causing a Price Increase

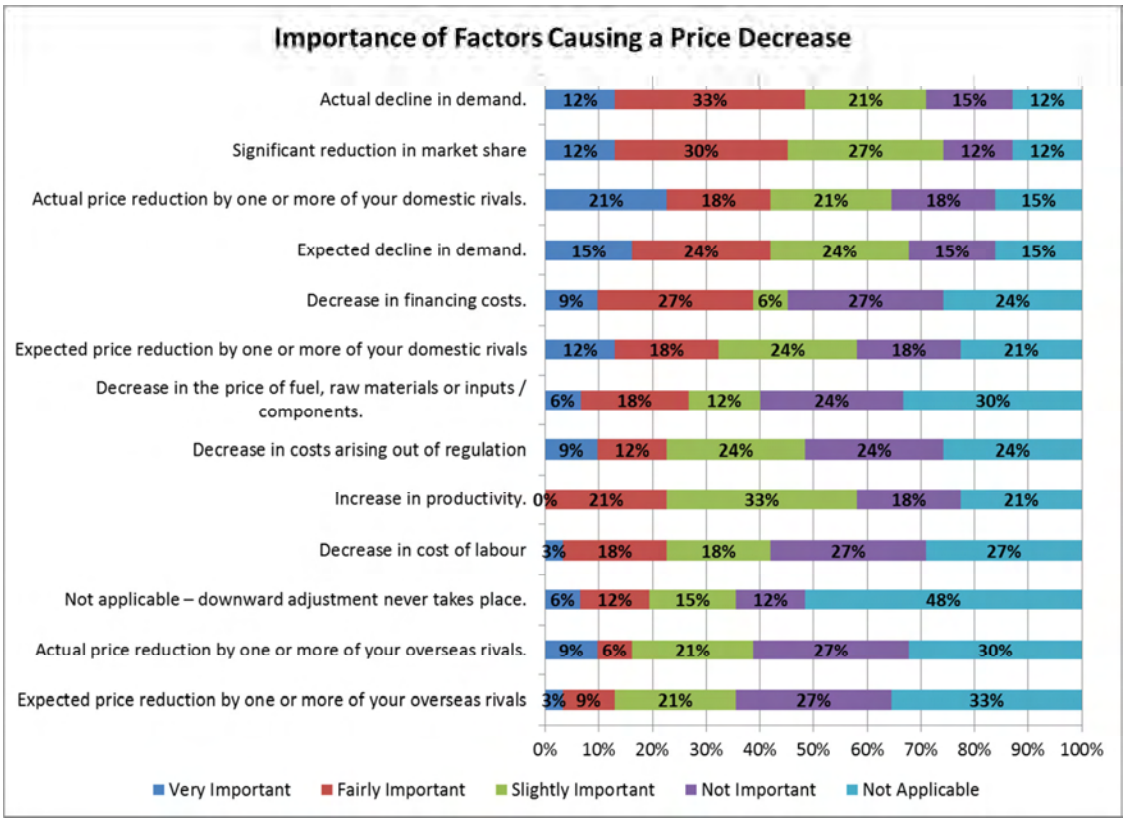


Ranked by cumulative 'very important' and 'fairly important' responses 'increase in cost of labour' is seen as the factor most responsible for increasing price (60% importance). This is followed by 'increase in financing costs' (54% importance) and 'increase in fixed costs' (54% importance).

Ranking only by 'very important' responses; 'increase in financing costs' is ranked first (30%) with 'increase in cost of labour' and 'increase in fixed costs' second and third with 24% and 18% respectively.

Both methods show the importance of internal cost structures when deciding to increase costs.

Figure 18: Importance of Factors Causing a Price Decrease

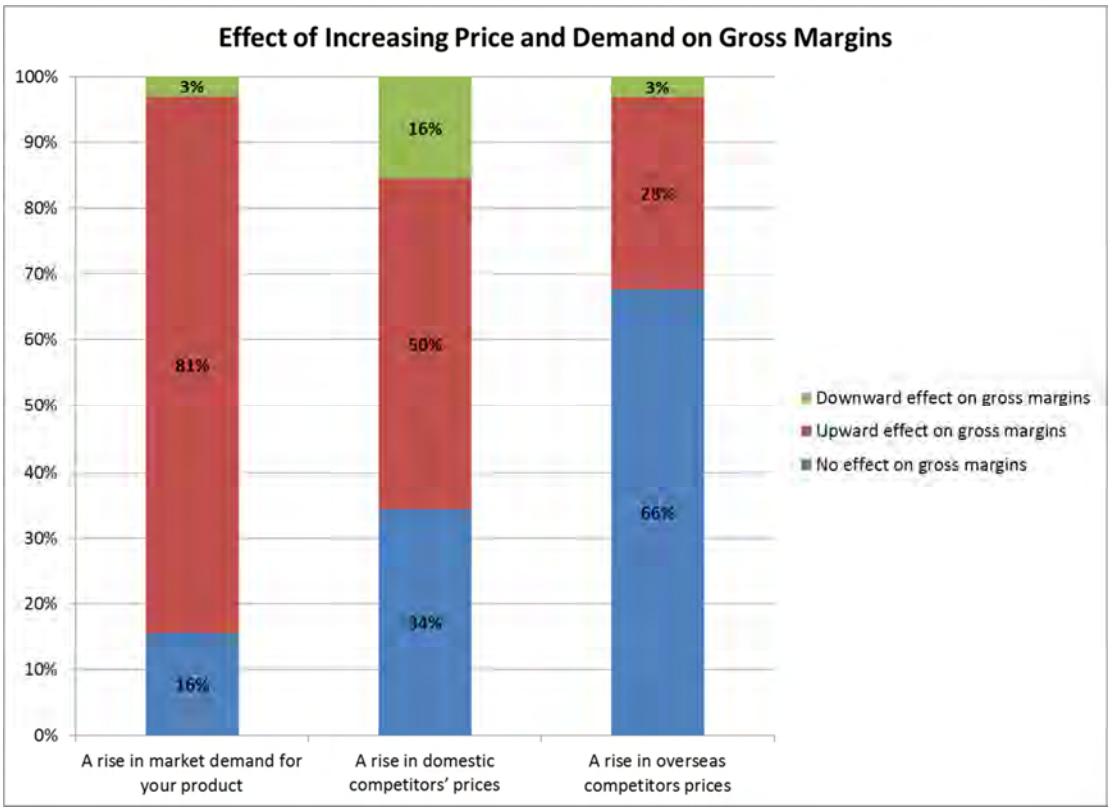


Ranked by cumulative 'very important' and 'fairly important' responses the most common reason to decrease prices is a decline in demand (45% importance) followed by a reduction in market share (52% importance). A price reduction by competitors is ranked third with 39% importance.

Ranking only by 'very important' responses sees a price reduction by competitors as most important (21%) followed by an expected decline in demand (15%)

Overall, poor performance comes out as more compelling reason to drop prices rather than external focus, such as competitor prices.

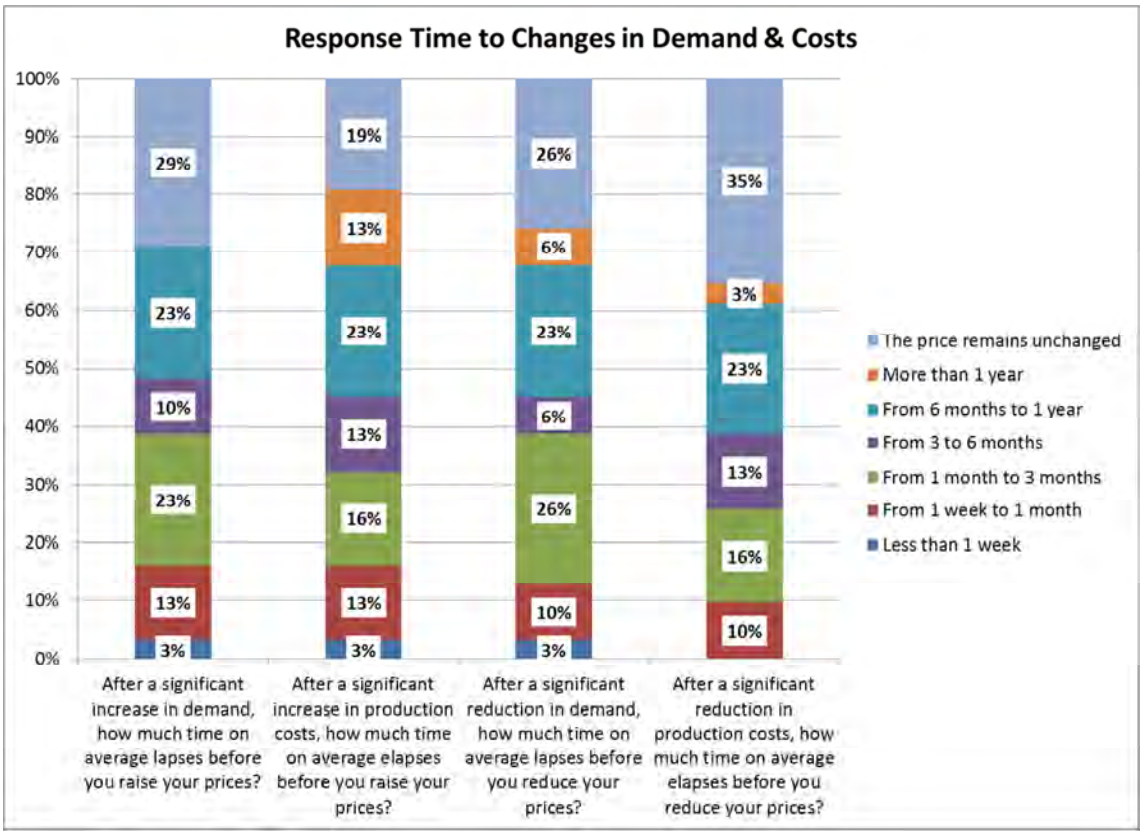
Figure 19: Effect of Increasing Price and Demand on Gross Margins



A rise in market demand has by far the most prevalent impact in increasing gross margins with 81% of companies seeing this effect. A rise in overseas competitor prices has the least with only 28% companies reporting an upward effect.

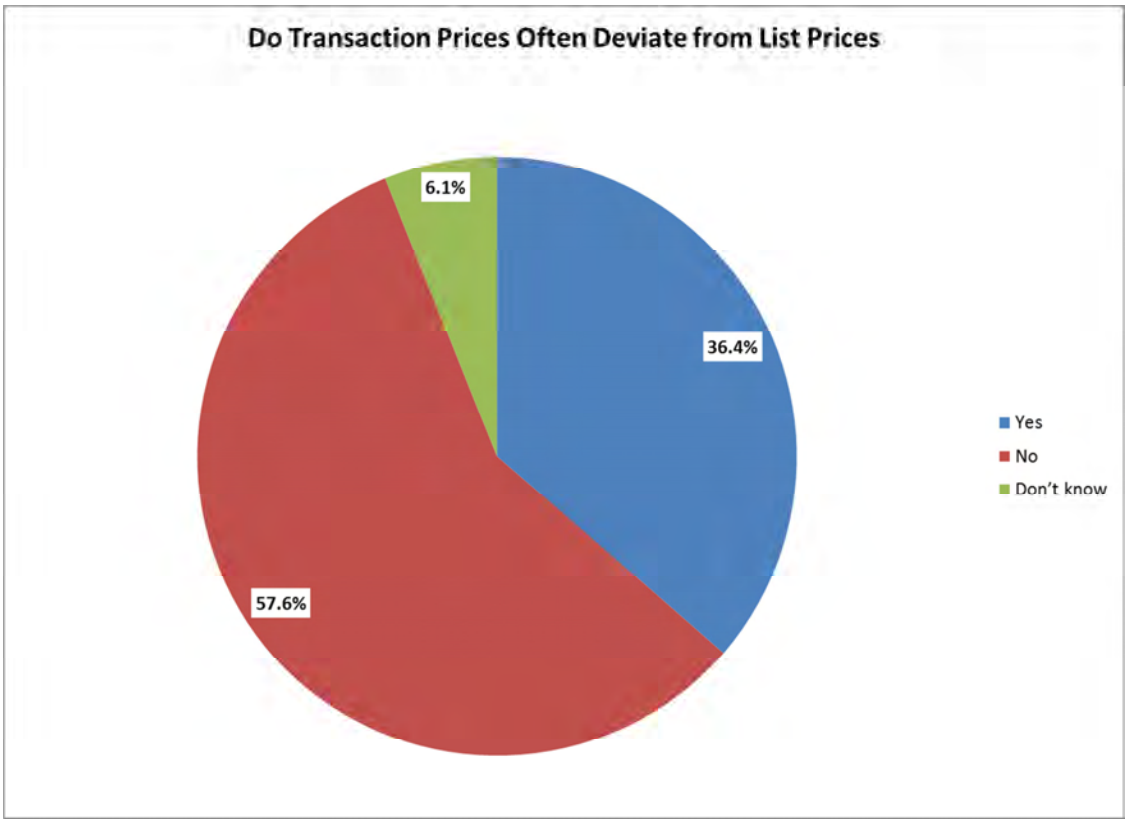
In general there is little indication of a downward effect on gross margins with a rise in domestic competitors prices the highest with 16%. There seems to be little impact overall due to overseas competitors prices with 66% of companies reporting that an increased price for these competitors services has no effect on local gross margins.

Figure 20: Response Time to Changes in Demand & Costs



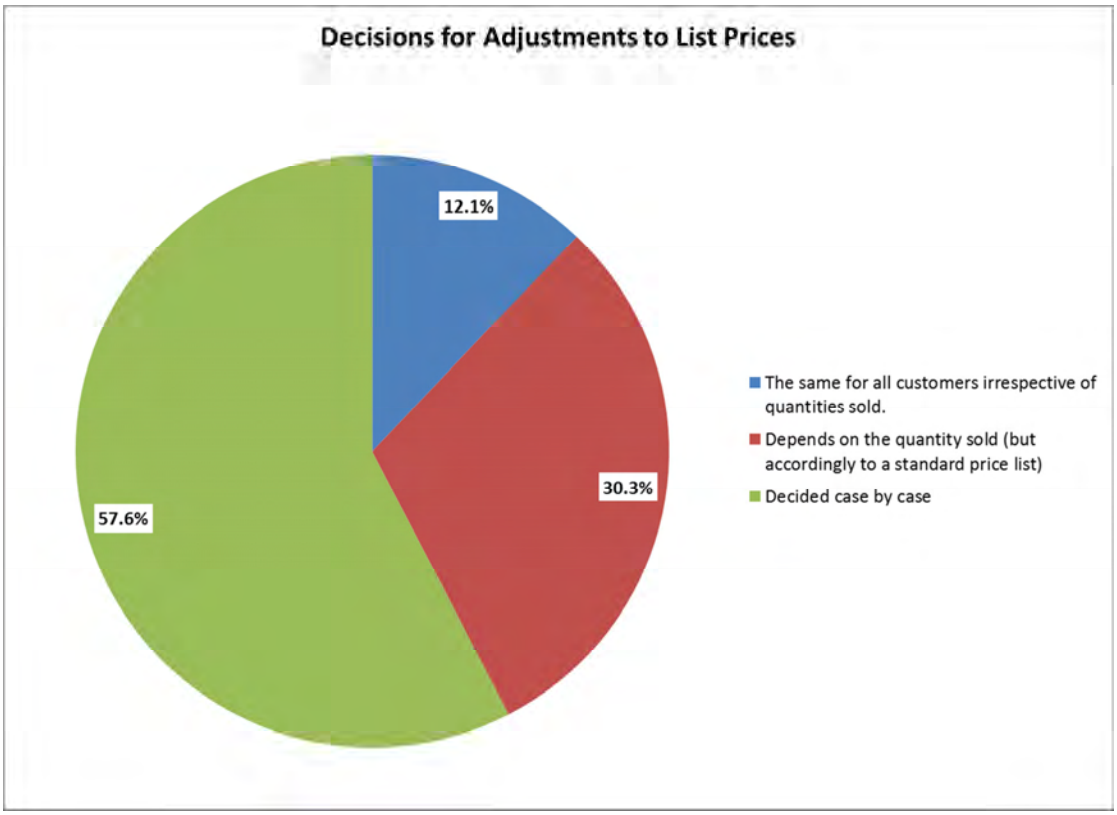
Overall response times to changes in production costs and demand are quite similar. A response within a year is in the majority across all four situations (approximately 70%). The situation showing the longest response time or no response is a reduction in production costs where a response only happens after a year 3% of the time and not at all 35% of the time.

Figure 21: Do Transaction Prices Often Deviate from List Prices



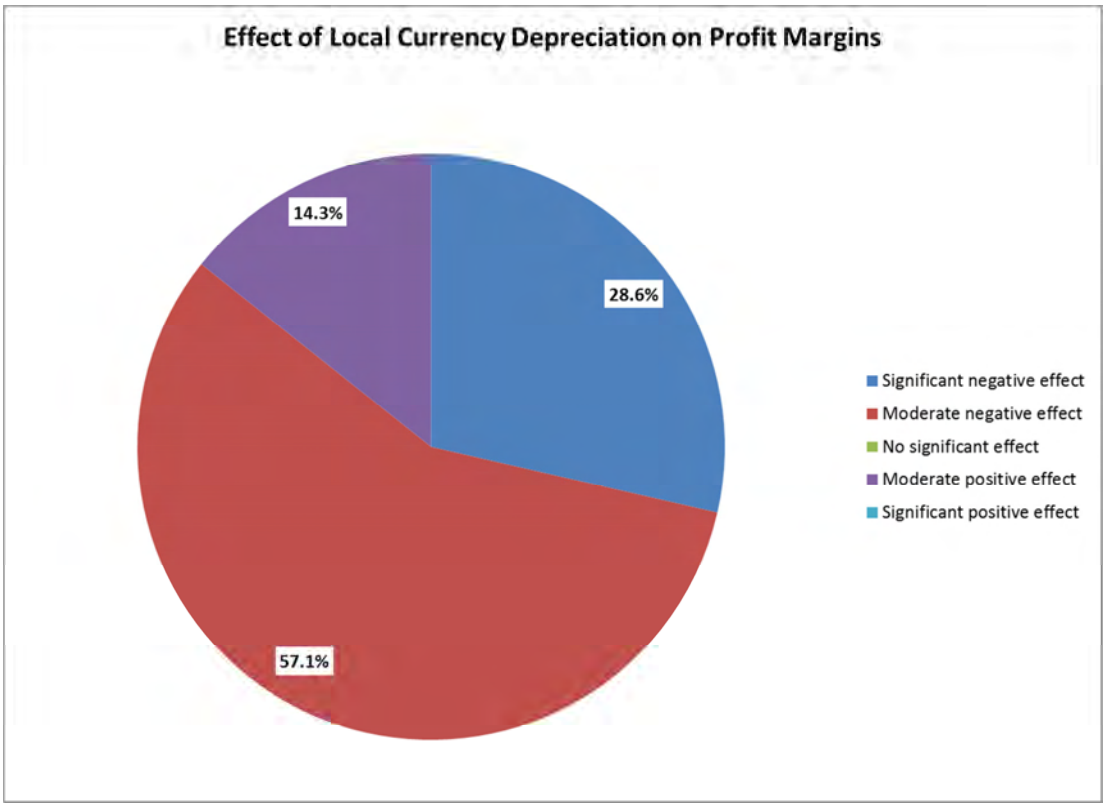
Most companies (58%) see no deviation from their list prices while 36% indicate that the price charged for a service is often different to their set price.

Figure 22: Decisions for Adjustments to List Prices



Only a small proportion (12%) do not see variation in per service pricing dependent on customer or quantity sold. The majority (58%) decide the per service price on a case by case basis dependent on the customer and quantities sold. A smaller proportion of 30% have fixed discount structure based on the overall sales quantity.

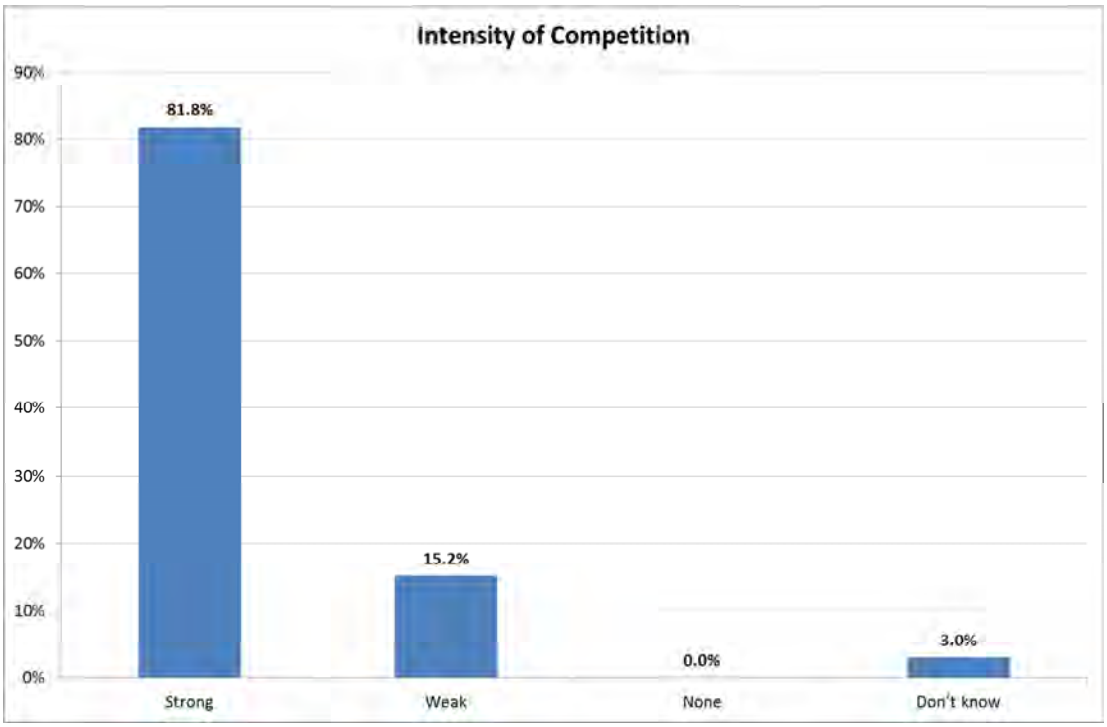
Figure 23: Effect of Local Currency Depreciation on Profit Margins



The negative movement of local currency has an overall negative effect as reported by 86% of companies. 29% indicated a significant negative effect and 57% a moderate negative effect. The remainder (14%) indicated a moderate positive effect. Although the majority saw currency depreciation having a negative effect the significance of overall effect (positive or negative) was moderate (86%).

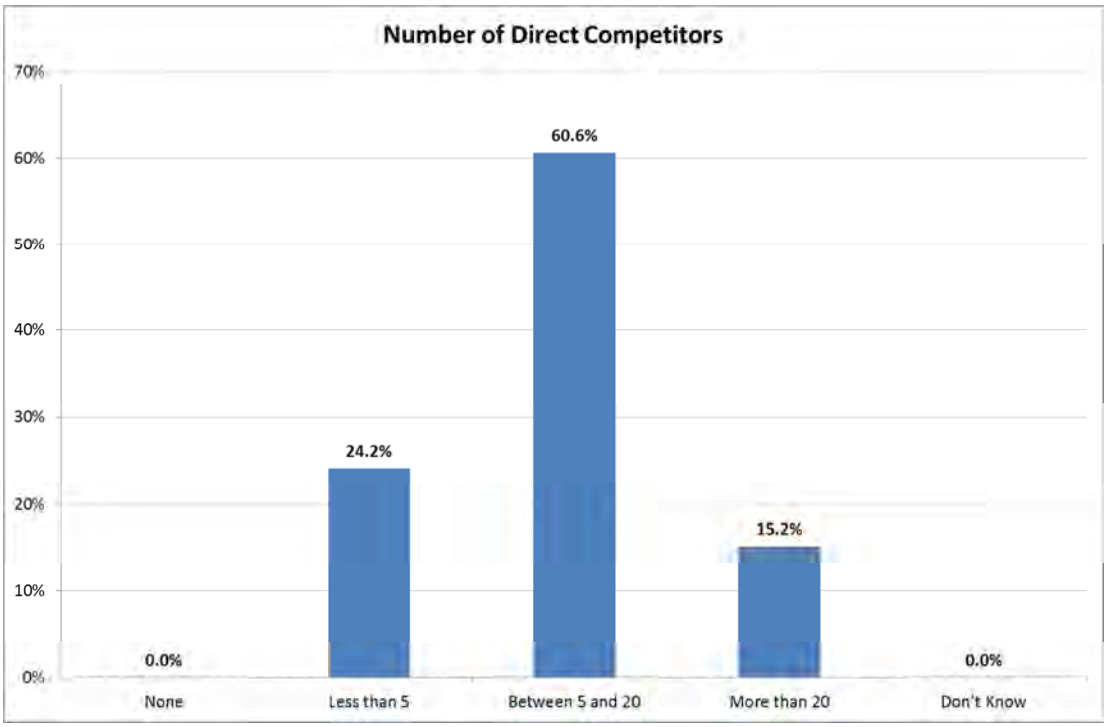
5.6 Competition

Figure 24: Intensity of Competition



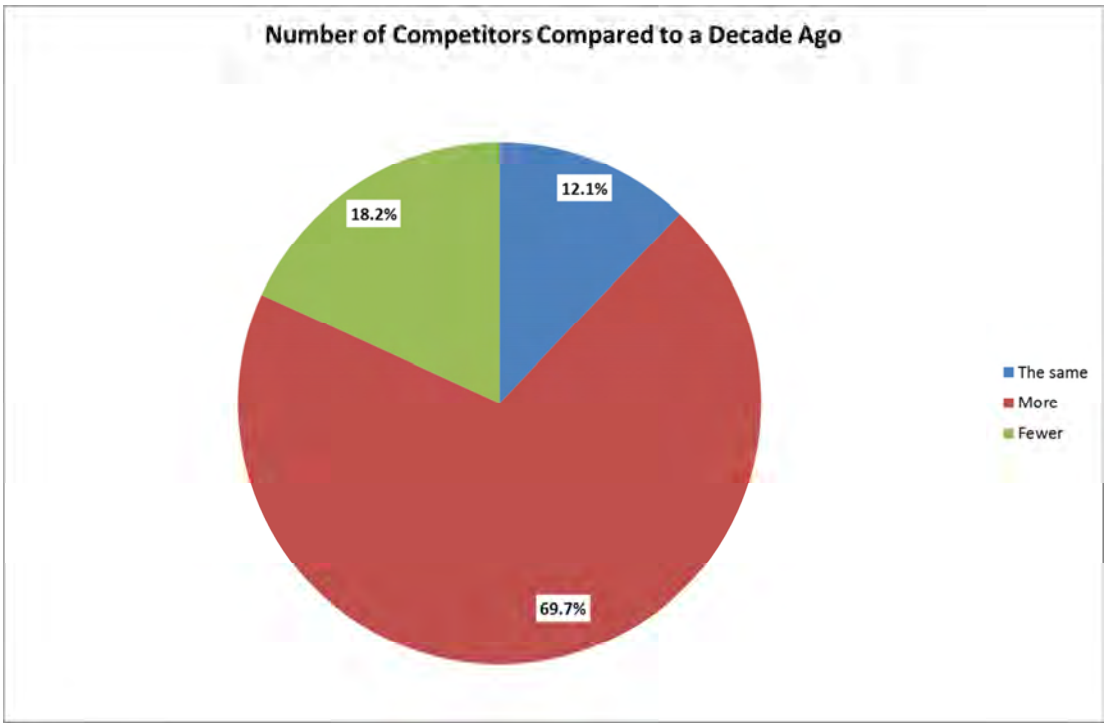
An overwhelming majority of companies (82%) indicated the intensity of competition they faced as 'strong'.

Figure 25: Number of Direct Competitors



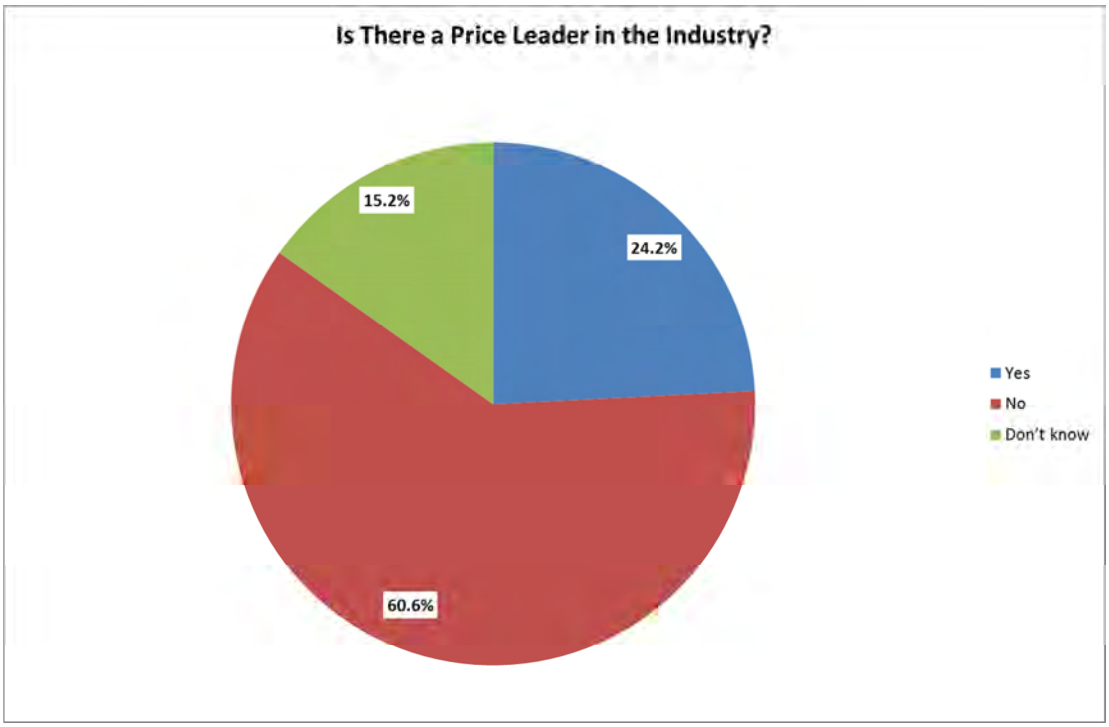
61% of companies state that they face direct competition from between five and twenty other firms.

Figure 26: Number of Competitors Compared to a Decade Ago



The majority of companies (70%) feel that the number of competitors has increased significantly in the last decade with only 18% stating that the number of direct competitors has decreased

Figure 27: Is there a Price Leader in the Industry

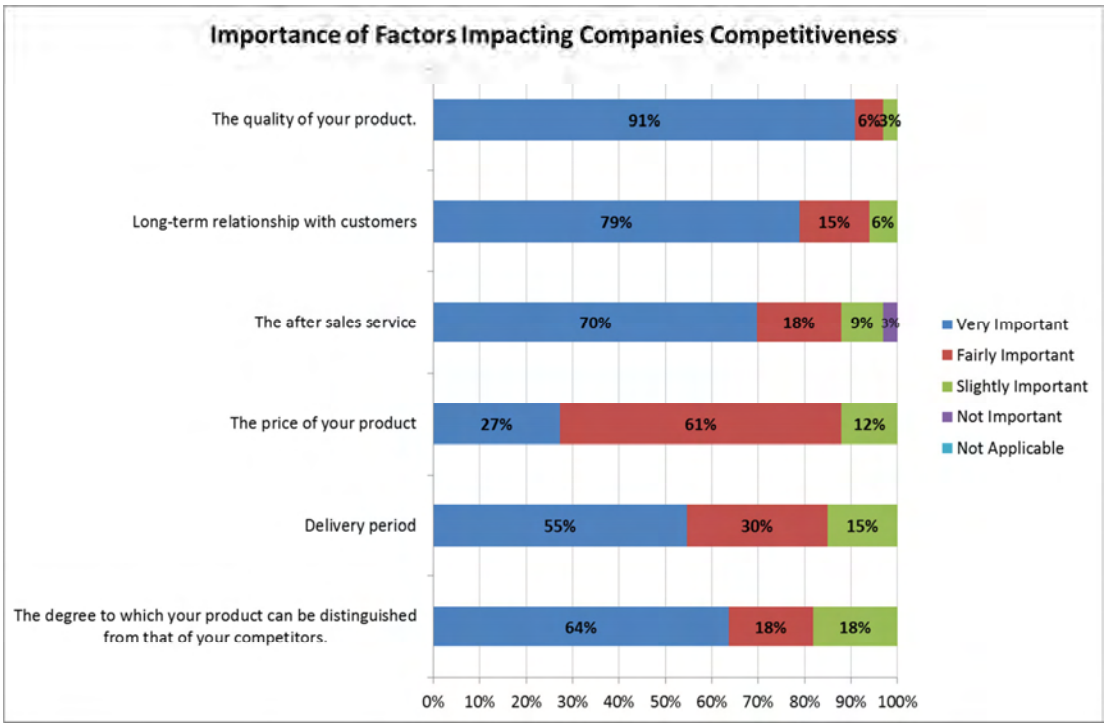


The existence of a price leader in their relevant industries is denied by 61% of companies who feel that overall price direction is not set by one particular firm. 24% of companies state that there is a price leader in their industry.

Figure 28: Price Dependency on Competitors

The majority of companies (58%) feel that their pricing decisions are made independent of competitors prices.

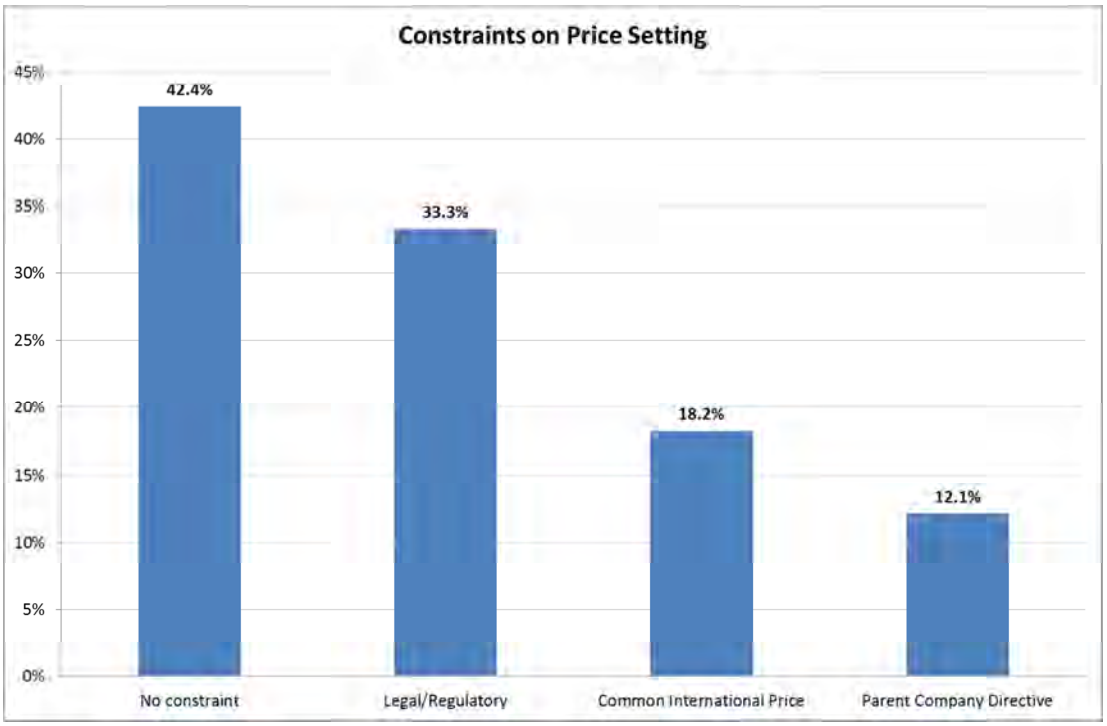
Figure 29: Importance of Factors Impacting Companies Competitiveness



Ranking in terms of the combined frequency of 'very important' and 'fairly important' responses, quality of product or service is the most important factor impacting a company's competitiveness. This followed by 'long-term relationship with customers'. Price is only in fourth rank and if the frequency of 'very important' responses was to be considered alone, would be the least important factor.

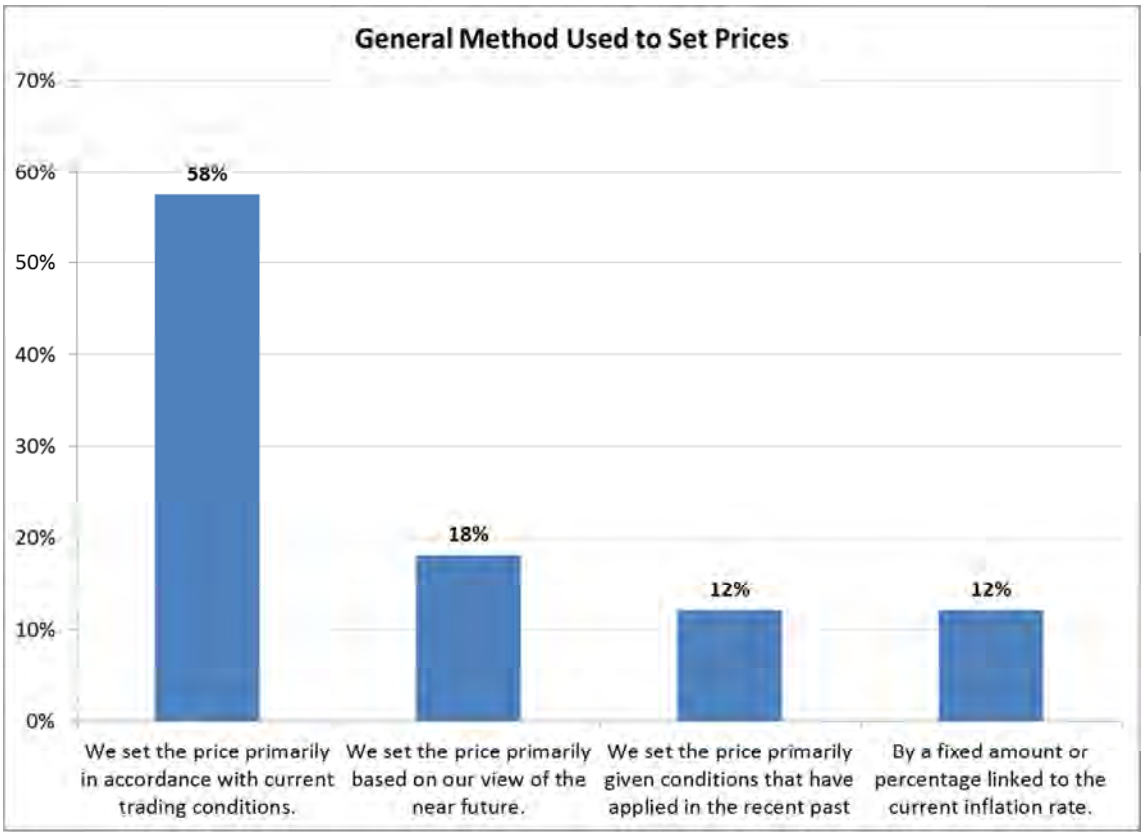
5.7 Factors Impacting Price Setting

Figure 30: Constraints on Price Setting



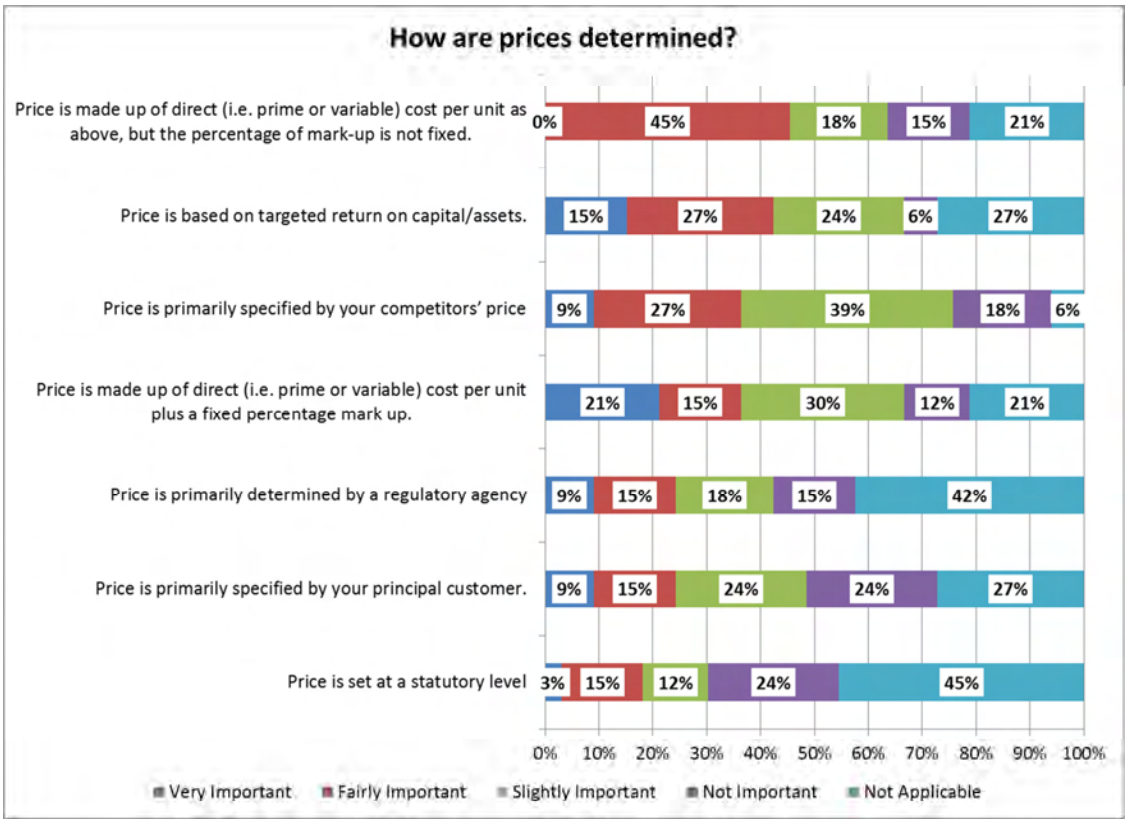
Regarding local constraints on price setting 'no constraint' had the highest frequency of responses (42%) followed by 'legal/regulatory constraints' (33%) which is common amongst financial service institutions but would only account for a portion of the price charged.

Figure 31: General Method Used to Set Prices



When asked what method was generally used to set prices the majority of companies (58%) stated that they looked at present conditions. 18% looked to their future estimates, 12% looked at historical information and only 12% adjust according to the inflation rate.

Figure 32: Factors in Determining Price

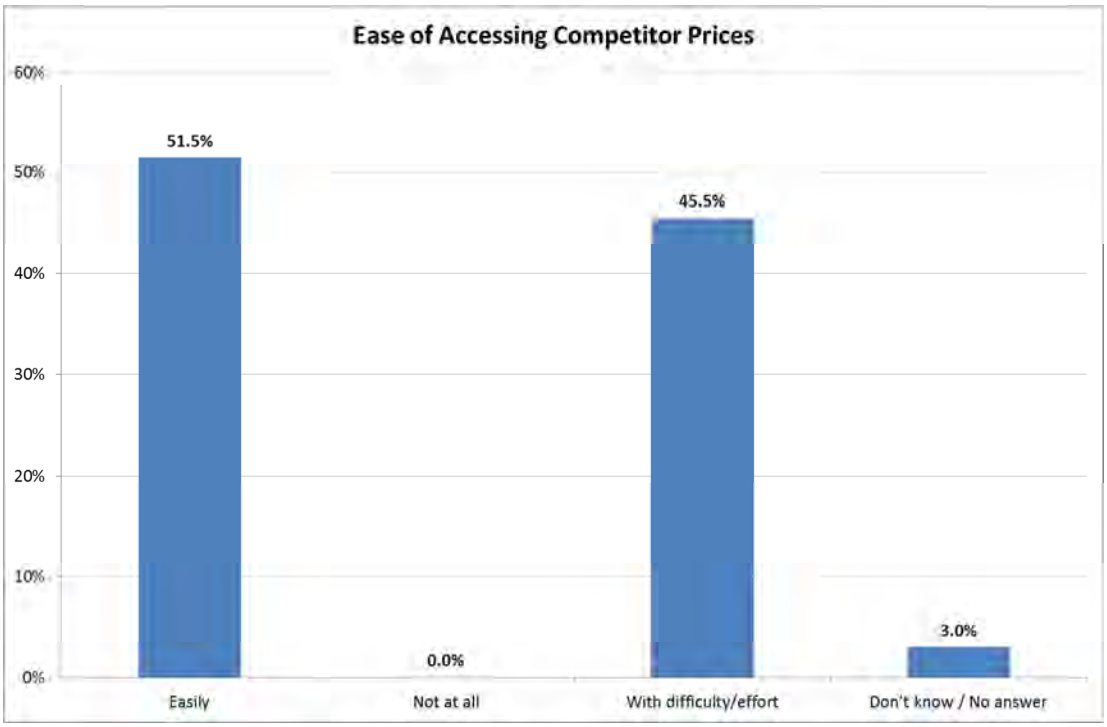


Ranking by the cumulative frequency of 'very important' and 'fairly important' responses by factor; non-fixed, mark-up pricing is the most commonly used pricing method (45% importance). This is followed by price based on targeted returns on capital or assets (42% importance).

Ranking only by 'very important' responses; fixed mark-up pricing is established as the most common method followed by return on capital or assets. In either ranking some form of mark-up pricing is seen as the most important method. External foci for pricing decisions, such as customers, regulatory agencies or competitors, are ranked lower.

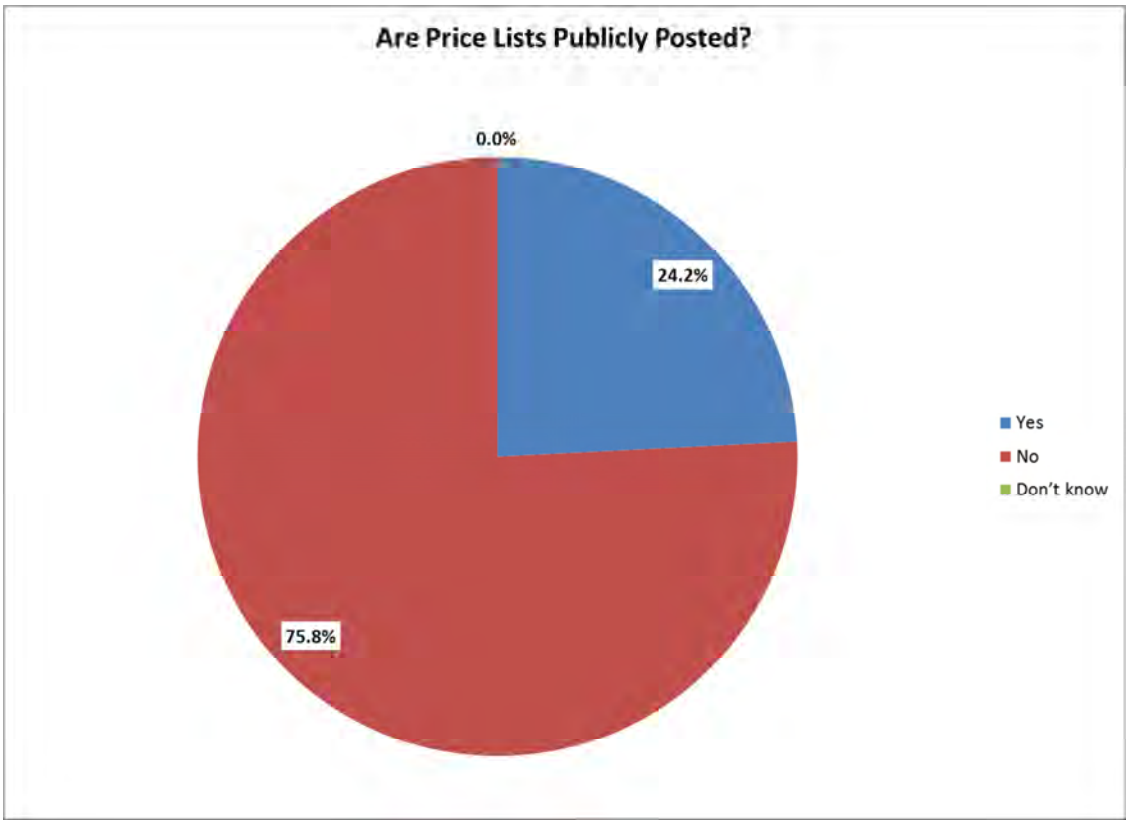
5.8 Access to Information

Figure 33: Ease of Accessing Competitor Prices



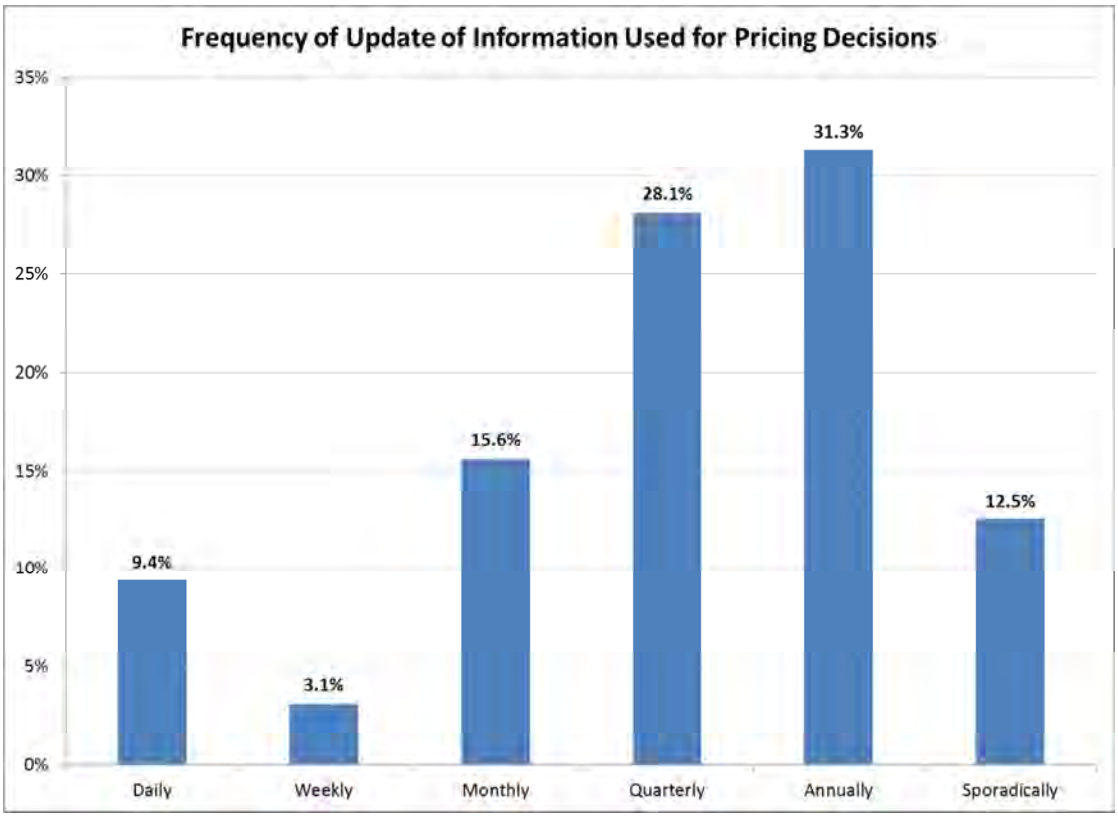
97% of companies feel that they can get visibility of their competitors prices with 52% saying that this can be accomplished with relative ease. 45.5% stated that it takes some effort to access competitor prices.

Figure 34: Are Price Lists Publicly Posted?



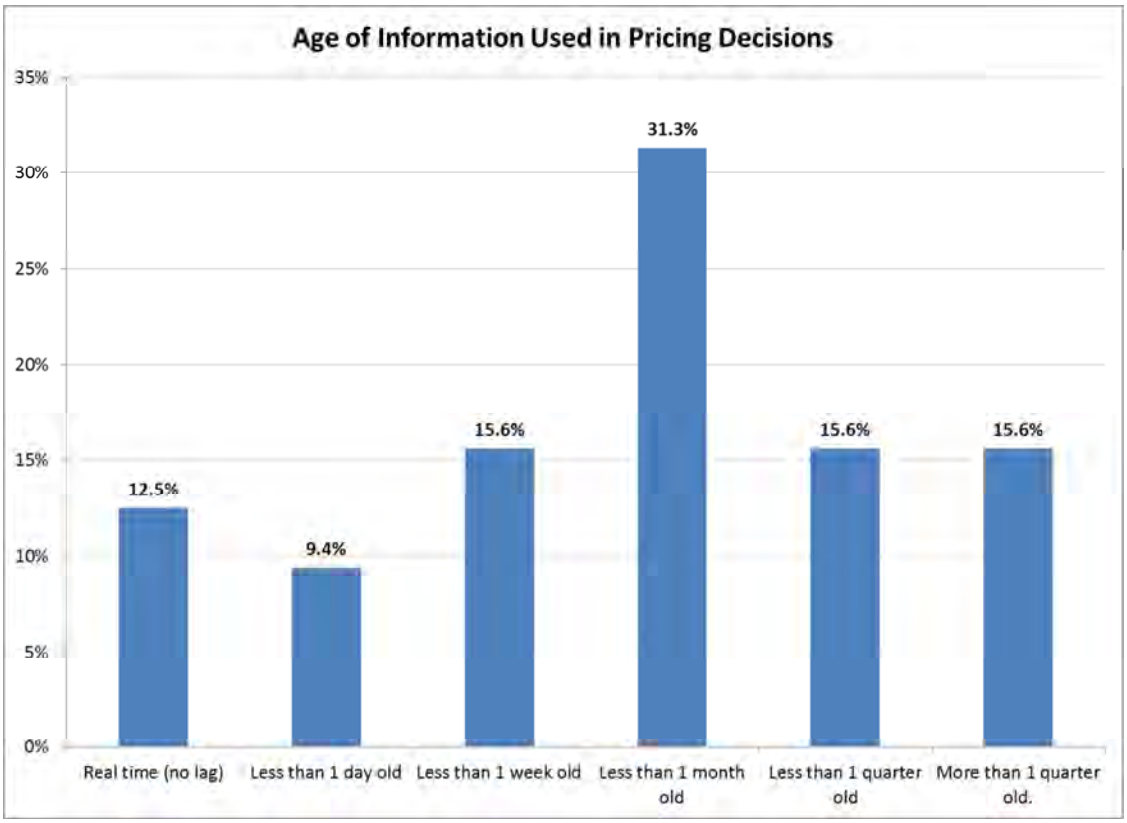
An overwhelming majority of companies (76%) do not publish their price lists.

Figure 35: Frequency of Update of Information Used for Pricing Decisions



The majority of companies (59%) update their information regarding pricing at most once a quarter. More than half of these (31% of total) only update their informationonce a year. 13% of companies due this sporadically as needed.

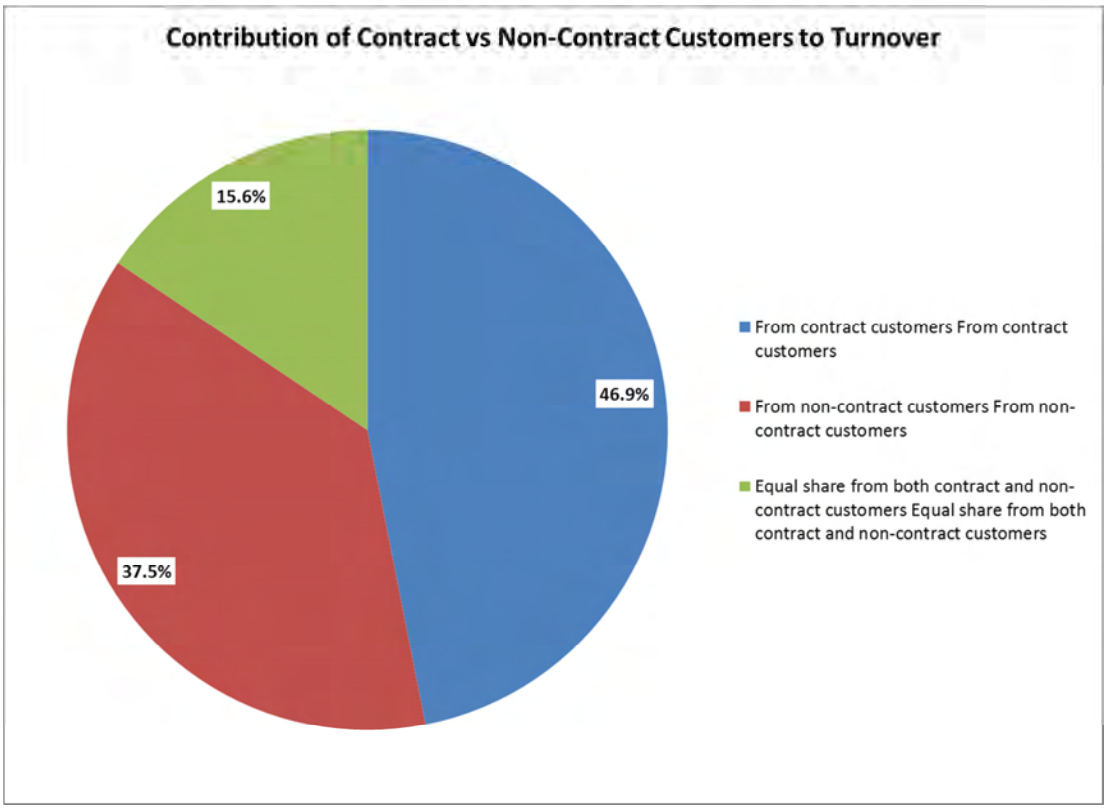
Figure 36: Age of Information used in Pricing Decisions



The highest frequency of response was that information used in updates is, at most, less than 1 month old (31%) while overall; information with a lag less than one month was used by 69% of companies. Only 16% of respondents indicated that information used was more than a quarter old. While a relatively large amount of time passes between update of information, the information used is, in general, very relevant.

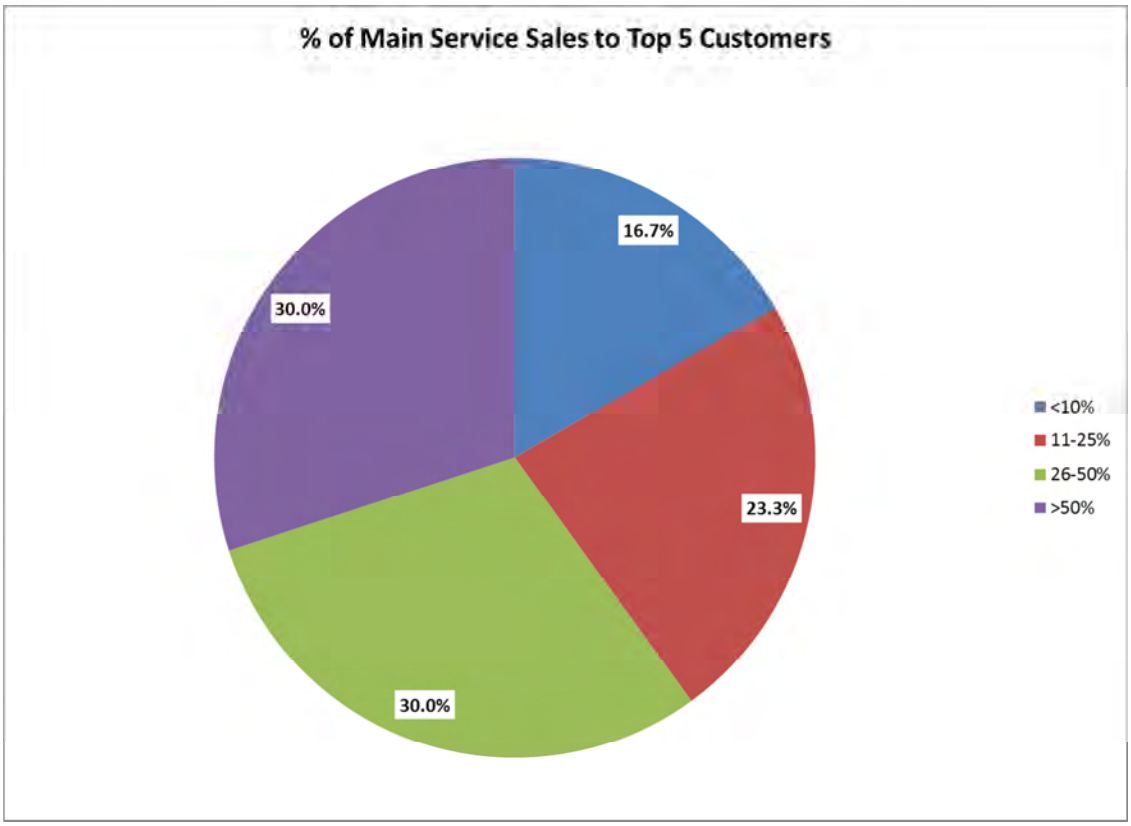
5.9 Customer Relations

Figure 37: Contribution of Contract vs. Non-Contract Customers to Turnover



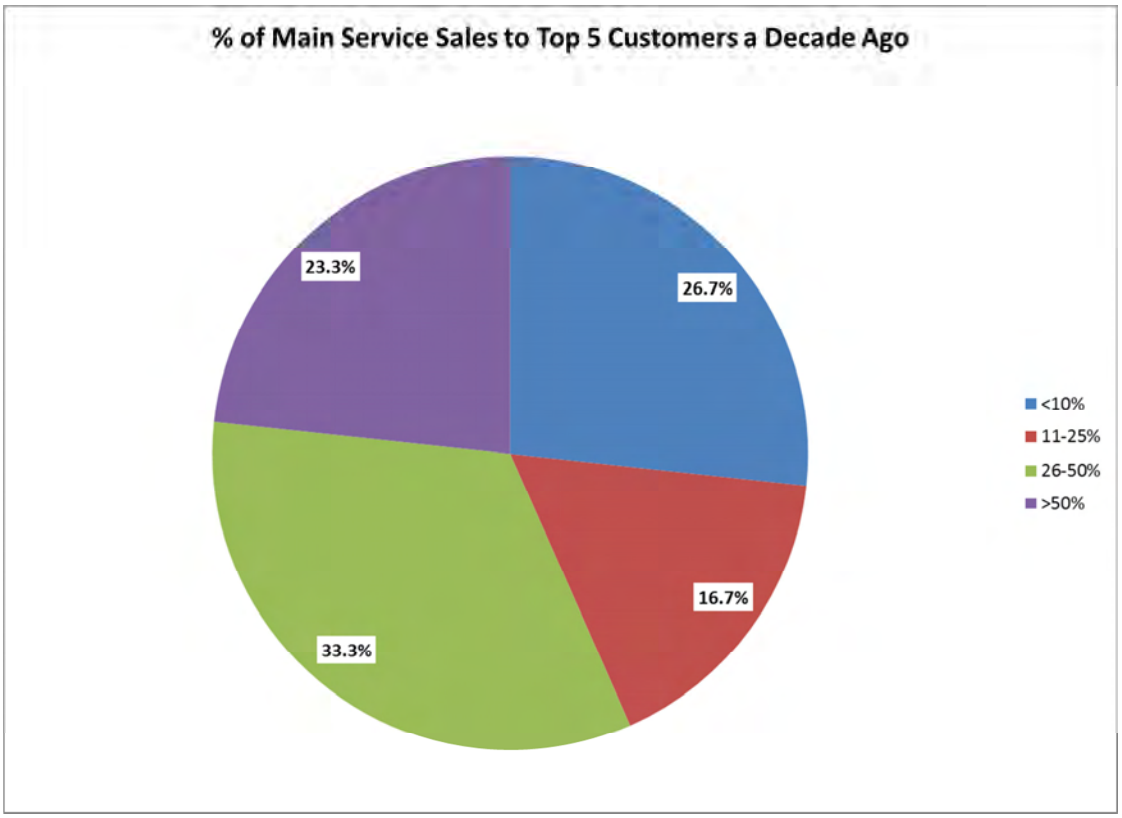
Companies which see the bulk of their revenue coming from contract customers have the highest frequency at 47% with 38% of companies selling mainly to non-contract customers.

Figure 38: Percentage of Main Service Sales to Top 5 Customers



A large proportion of companies (30%) see a dependency on their top five customers for more than 50% of their sales. Overall these top customers are an important source of revenue with only 17% of companies seeing less than 10% of sales coming from these "golden clients".

Figure 39: Percentage of Main Service Sales to Top 5 Customers a Decade Ago



Sales to the top five customers has increased in the last decade as previously 23% of firms saw the majority of sales going to these clients, 7 percentile points less than the current situation. In addition the percentage of companies who saw less than 10% of revenue coming from the top five clients was 27% where it is 17%, a 10 percentile point decrease.

6. Discussion of results

6.1 Introduction

This section presents the propositions introduced in Chapter 3 and discusses the implications of results in the previous Chapter on their validity. Each proposition has been presented separately and the information relevant to that proposition has been related to the literature discussed in Chapter 2. Finally a statement of the validity of each proposition is presented in the context of the data generated from the quantitative survey provided in full in Appendix B.

6.2 Proposition 1: Firms follow a time dependent process for price review

According to Greenslade and Parker (Greenslade & Parker, 2010) a firm employing time dependent price reviews or changes follows rules as to the frequency of price changes dependent on their competitive environment. This is in contrast to state dependent pricing which depends on internal or external shocks to motivate price reviews or changes.

The companies which were surveyed indicated that price reviews were planned to happen with regularity. This is indicated by the fact that in Figure 13 only 6% (non-cumulative) of companies state that price changes were planned to happen in response to a specific event. In addition only 12% had reviews sporadically with no particular time frame planned for. The majority (58%) planned to change price once a year with a further 21% seeing a quarter as the minimum time to pass between price reviews.

The results in Figure 14 for actual changes in the twelve months prior to the survey showed that 52% actually changed their prices once while 18% changed them twice. Only 3% indicated prices changes more often than once a month which was the same frequency as those who planned to review this often.

Fabiani *et al* (Fabiani, et al., 2006) describe that time dependent companies may increase the frequency of their reviews depending on the overriding market conditions but that this increase would still be rule dependent and not in response to specific

events. Indeed, overall, companies surveyed indicated in Figure 15 that they had increased the frequency of their reviews in the last decade with 36% saying there had been an increase while 45% said there had been no change. Regardless, as discussed above, reviews and changes were still, in the main, planned for specific intervals and not sporadically or in response to specific events. When asked for the reasons for the change in frequency the most common response was 'increased competition' (24%). This aligns with results seen in Figure 26 where 70% of companies indicated that the number of competitors had increased over the last decade

Overall the actual changes were in line with the stated planned frequency of reviews which were set at specific intervals. This indicates a high level of time dependency. The fact that the actual frequency of reviews and changes may change dependent on prevailing market conditions accounts for the increased frequency of reviews due to increased competition (Fabiani, et al., 2006).

Thus price reviews and changes of South African service firms are time dependent.

6.3 Proposition 2: Prices are Sticky

Price stickiness is at the heart of the other propositions discussed in this paper and evidence for this phenomenon has been shown in international studies by a number of other authors (Alvares, et al., 2005; Creamer & Rankin, 2007; Fabiani, et al., 2006; Greenslade & Parker, 2010; Bils & Klenow, 2004).

The statements in the previous proposition indicate that firms in the South African services sector are price sticky due to their reliance on time dependent pricing (Calvo, 1983; Taylor, 1980). By its nature this method of determining when to review and change prices does not depend on specific events in the form of competition or external economic shocks.

When companies were presented with a number of options as to why prices may be slow to adjust (price sticky) the results in Figure 12 show that the most prevalent common reason was that more frequent prices changes would disturb customer relationships (71%) with 61% saying that the factors influencing prices do not change often enough for the prices themselves to be changed. The high frequency of both these reasons indicates a high acceptance that:

1. Prices are sticky.
2. There are commonly understood reasons for this stickiness.

These reasons are examined in depth in particular propositions relating to them but are presented here in summary to understand their overall effect on price stickiness.

The following table ranks the factors seen in Figure 9 by the percentage of companies which saw the factors presented as applicable to them.

Table 2: Ranked Reasons for Slow Price Adjustments

Rank	Statement	% Yes	% No
1	Companies would like to adjust prices more often to reflect market conditions, but fixed-price contracts make it difficult to pass on price increases when a contract is active.	59	41
2	Prices depend mainly on the costs of labour and raw materials used in producing goods and services. Therefore, prices don't change until costs change.	56	44
3	The information used to review (and ultimately change) prices are available infrequently. Therefore, prices may be slow to adjust to new conditions	53	47
4	Companies delay price increases because they have an implied understanding with customers that they will not increase prices in depressed markets.	42	58
5	Companies delay price reductions because they don't want to be the first in the industry to reduce prices.	41	59
6	Companies delay increasing prices because they don't want to be the first in the industry to increase prices.	34	66

Although the first three show a frequency of positive responses above 50%, none show an overwhelming proportion of companies accepting them as applicable to them. Nonetheless the relative importance shows that fixed-price contracts, the static nature of costs and infrequent access to information are perceived as key reasons as to why price stickiness is seen in South African service firms.

Table 3: Ranked Reasons to Not Increase Prices

Rank	Reason	Very Important	Fairly Important	Combined
1	The risk is too high that our competitors do not change their prices.	13%	45%	58%
2	It would antagonise our customers	35%	19%	55%
3	The variable costs in our company do not change by much with market conditions, making our price quite stable.	13%	39%	52%
4	The existence of written contracts specifying that prices can only be changed when the contract is renegotiated.	29%	19%	48%
5	The risk is too high that we subsequently have to re-adjust our prices in the opposite direction.	13%	32%	45%
6	The existence of an implicit contract (regular contact with a customer without any written contract).	23%	13%	35%
7	The preference for maintaining prices at a certain threshold (e.g. you would rather charge R9.99 than R10.00).	7%	17%	23%
8	The costs implied by price changes (e.g. printing of price lists or information gathering costs).	7%	3%	10%

The above table shows the reasons to not increase prices ranked by the combined frequencies of 'very important' and 'fairly important' responses seen in Figure 10. Risk of competitors not changing prices or co-ordination failure is ranked first. This is in keeping with co-ordination failure being a major factor causing price stickiness as seen across a number of other studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012) and discussed in Chapter 2. This is examined in greater depth in the next section.

The next two most important factors fall into the results seen in Figure 12 with antagonisation of customers relating to 71% of firms saying that more frequent price increases would disturb customer relationships. In addition the static nature of variable costs as the third most important factor is in line with 61% of companies stating that the factors influencing cost do not change often therefore prices do not change often.

Table 4: Ranked Reasons to Not Decrease Prices

Rank	Reason	Very Important	Fairly Important	Combined
1	The risk is too high that we subsequently have to re-adjust our prices in the opposite direction.	20%	23%	43%
2	The risk is too high that our competitors do not change their prices.	17%	27%	43%
3	The existence of written contracts specifying that prices can only be changed when the contract is renegotiated.	21%	18%	39%
4	The existence of an implicit contract (regular contact with a customer without any written contract).	17%	20%	37%
5	The variable costs in our company do not change by much with market conditions, making our price quite stable.	10%	23%	33%
6	It would antagonise our customers	14%	14%	28%
7	The costs implied by price changes (e.g. printing of prices lists or information gathering costs).	7%	17%	23%
8	The preference for maintaining prices at a certain threshold (e.g. you would rather charge R9.99 than R10.00).	3%	13%	17%

The results from Figure 11 ranked above show the most common reasons that firms do not decrease their prices. None of the given reasons show an overwhelmingly high combined importance but the risk of re-adjustment is seen as the most important reason due to the higher frequency of 'very important' responses. This reluctance to decrease prices due to short term factors or temporary shocks is described in Chapter 2 and cited in a various similar studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012; Alvares, et al., 2005). This is common across sectors and not specific to services although this serves to confirm previous studies.
The next four reasons are in sync with Table 3 and therefore with Figure 12. Co-ordination failure and explicit and implicit contracts (customer relations) are seen as important reasons to not decrease price

Adding the ranking of common factors found in previous studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012) the following emerges:

Table 5: Comparative ranking of theories on price stickiness from this study to previous studies

	Fabiani ,et al	Greenslade & Parker	Amirault, Kwan & Wilkinson	South African Service Firms
Explicit Contracts	1	2	1	2
Co-ordination Failure	2	1	2	1
Implicit Contracts	4	4	3	3
Menu Costs	3	3	4	4

The results from South Africa service firms are in line with those from previous studies with explicit contracts and co-ordination failure the two most important factors causing price stickiness with implicit costs and menu costs the least important.

The information in this section serves to confirm that South African service firms are price sticky and the factors causing this show a similar importance as seen in other studies of the same nature.

6.4 Proposition 3: Explicit contracts and co-ordination failure are the major causes of price stickiness

As discussed in Proposition 2, explicit contracts and co-ordination failure are described as the most common causes of price stickiness in a number of previous studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012). In terms of factors comparable across these studies this holds true for South African service firms but will be examined here using additional information relevant to these factors.

30% of companies generate more than 50% of their revenue from their top five customers with a further 30% generating more than a quarter of their revenue from this source (Figure 38). Only 17% see less than 10% of their revenue coming from these premier customers. As shown in Figure 39 the dependence on top clients has increased from a decade ago. Previously only 23% of companies had a 50% or more dependence on the top clients which means that there has been a 7 percentile point increase in ten years. Additional evidence of the increasing importance of key customers is the fact that there has been a 10 percentile point decrease in the frequency of companies that saw less than 10% of their sales going to their top five customers (27% a decade ago). This increasing trend of top customer reliance highlights the importance of not disturbing customer relations as seen in Figure 12.

Figure 27 shows that 61% of companies feel that there is no price leader in their industry with only 24% indicating that there is one. Furthermore as shown in Figure 28; 58% of companies are shown to act independently in their pricing decisions without consideration of competitor's prices. This is due to the assertion that quality of product

is the most important competitive factor that South African service firms have. 91% of companies felt that product quality has a 'very important' impact on competitiveness as seen in Table 6 below (drawn from Figure 29).

Table 6: Ranked Importance of Factors Impacting Competitiveness

Rank	Competitiveness Factor	Very Important	Fairly Important	Combined
1	The quality of your product.	91%	6%	97%
2	Long-term relationship with customers	79%	15%	94%
3	The after sales service	70%	18%	88%
4	The price of your product	27%	61%	88%
5	Delivery period	55%	30%	85%
6	The degree to which your product can be distinguished from that of your competitors.	64%	18%	82%

The second most important factor is the existence of a 'long-term relationship with customers'. It has a combined importance of 94% and 79% of companies see it as 'very important'. Price is only ranked as the fourth factor and has the lowest frequency of 'very important' responses. This indicates that it is important but not a differentiator; price must be set at an acceptable level but ultimately it is the management of quality and relationships and not price that drives sales. The information presented above indicates 2 key points:

- Price co-ordination is not a key consideration to companies (as the price competitors charge is secondary to the quality of their own service).
- Long term relationships with key customers are very important and becoming more so.

Relating this to the findings in Proposition 2 it can be seen that the reason for the high rankings of co-ordination failure, explicit contracts and implicit contracts is that they are directly affected by the assertions above. Furthermore this verifies the findings of previous studies (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012) as shown in Table 5.

Explicit contracts and Co-ordination failure are the major causes of price stickiness in South African service firms verifying this proposition.

6.5 Proposition 4: Menu costs have a small comparative influence on pricing decisions

Menu costs as first described by Sheshinski and Weiss (1977) have historically been used to account for high levels of price stickiness in firms. However recent studies have found this not to be accurate (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012).

When asked about public price lists 76% of companies indicated that they do not publish their price lists (Figure 34). In addition, in Figure 22 58% of companies indicated that transaction prices are decided on a case by case basis. The implication of this is that menu costs (were they to be incurred) would not be as substantial as those seen in retail firms where prices are publicly displayed.

The second component of menu costs as described in Chapter 2 is the cost of accessing information used in making pricing decisions. As shown in Figure 33; 97% of companies are able to access competitor prices with the majority (52%) able to do so easily. This, as well as the high proportion of companies (58%) which make pricing decisions independent of competitor's prices (Figure 28) implies that the overall importance (and therefore money spent on this) would not be of major significance. Furthermore the frequency of update of this information is quite low with Figure 35 showing that 31% of companies only do this annually, 28% quarterly and 16% monthly.

The above information explains the very low ranking of menu costs as factors delaying companies' price increases and decreases. In Table 3 (Ranked Reasons to not Increase Prices) 'the costs implied by price changes' (menu costs) are ranked last with only a 10% combined frequency of 'very important' and 'fairly important' responses. This factor has a similar low ranking of seventh out of eight in Table 4 (Ranked reasons to not decrease prices) with a combined very and fairly strong frequency of only 23%

Thus menu costs are not relevant to firms in the South African Services sector due the low incidence of public price lists and the relationship based nature of pricing (on a case to case basis). In addition information use is infrequent.

Therefore this proposition holds and menu costs have a small comparative influence on price decisions for South African service firms. This is in line with recent studies accurate (Amirault, Kwan, & Wilkinson, 2006; Fabiani, et al., 2006; Greenslade & Parker, 2012) and further evidence against Sheshinski and Weiss's (1977) assertions.

6.6 Proposition 5: Wage rigidities account for the noted high relative price stickiness of service firms

As discussed in Chapter 2; previous studies (Alvares, et al., 2005; Creamer & Rankin, 2007; Greenslade & Parker, 2012; Fabiani, et al., 2006) have shown that prices are stickier in the services sector than seen in manufacturing or retail. Calvo (1983) and Taylor (1980) attribute a large part of price stickiness to firms following a time dependent pricing model. Thus any factor that impacts the frequency of price review or change in a time dependent system will ultimately impact price stickiness.

Proposition 1 showed that South African service firms follow a time dependent pricing model and that 58% plan to review only once a year (Figure 13) with 52% actually changing prices once in the last twelve months (Figure 14). 9% said that they had not changed their prices as at all.

Table 2 shows that the second ranked reason for slow price changes is that costs depend of the cost of labour and raw materials and that these do not change often enough to warrant a price increase (56%). In general, service companies incur very few costs due to raw materials, if any. Therefore only the portion of this statement regarding labour costs holds true to the companies surveyed.

Table 7: Ranked Factors Causing a Price Increase

Rank	Factor	Very Important	Fairly Important	Combined
1	Increase in cost of labour	24%	36%	61%
2	Increase in financing costs.	30%	24%	55%
3	Increases in fixed costs.	18%	36%	55%
4	Increase in costs arising from regulation	9%	39%	48%
5	Actual rise in demand.	12%	33%	45%
6	Expected rise in demand.	3%	36%	39%
7	Actual price increase by one or more of your domestic rivals.	9%	27%	36%
8	Significant increase in market share	9%	24%	33%
9	Expected price increase by one or more of your domestic rivals	9%	21%	30%
10	Increase in the price of fuel, raw materials or inputs / components.	15%	9%	24%
11	Not applicable - upward adjustment never takes place	3%	12%	15%
12	Actual price increase by one or more of your overseas rivals.	0%	15%	15%
13	Expected price increase by one or more of your overseas rivals	0%	15%	15%

The above table shows a ranked summary of results from Figure 17. According to this the biggest reason to increase prices is an increase in the cost of labour (61% combined importance). 'Increase in financing costs' is ranked second with 55% importance but depends heavily on the debt to equity ratio of the company. 'Fixed costs' is ranked third with 55% importance. An increase in the cost of raw materials is very low in the rankings with 15% importance.

As described in Chapter 2 the more labour intensive a firm, the lower the frequency of price reviews (Alvares, Hernando, & Burriel, 2011). As has already been mentioned, service firms by their nature have a larger portion of labour costs due to the minimal (or lack of) raw materials used. This is also shown in Table 7 due to the low ranking of the cost of raw materials as a factor in driving price increases.

Table 8 below (summarising Figure 18) shows the importance of these factors in causing a price decrease:

Table 8: Ranked Factors Causing a Price Decrease

Reason	Very Important	Fairly Important	Combined
Actual decline in demand.	12%	33%	45%
Significant reduction in market share	12%	30%	42%
Expected decline in demand.	15%	24%	39%
Actual price reduction by one or more of your domestic rivals.	21%	18%	39%
Decrease in financing costs.	9%	27%	36%
Expected price reduction by one or more of your domestic rivals	12%	18%	30%
Decrease in the price of fuel, raw materials or inputs / components.	6%	18%	24%
Decrease in cost of labour	3%	18%	21%
Increase in productivity.	0%	21%	21%
Decrease in costs arising out of regulation	9%	12%	21%
Not applicable - downward adjustment never takes place.	6%	12%	18%
Actual price reduction by one or more of your overseas rivals.	9%	6%	15%
Expected price reduction by one or more of your overseas rivals	3%	9%	12%

Compared to the combined importance of factors is the previous table, the strength of importance in Table 8 is low with ‘an actual decline in demand’ the highest with 45% combined importance. ‘Significant reduction in market share’ is second with 42%. A decrease in labour costs is quite low down with only 21%. However wage rigidities have the effect that companies cannot easily reduce wages (Taylor J. B., 1999) but the majority of salaried workers would get an inflationary increase once a year.

This disparity between the ability to increase wages and reduce them accounts for the difference in importance of cost of labour to increase prices and decrease prices (Table 7 and Table 8). Thus the annual review and change that the majority of firms engage in as seen in Figure 13 and Figure 14 can be attributed to an annual inflationary wage increase while decreases are mainly due to poor performance by the firm.

To truly understand the balance between these two factors additional research would have to be done to understand how often companies actually decrease prices as opposed to increasing them and what the corresponding change in wages was.

The information presented supports the proposition in the case of upward movement of prices but not downward movement. If South African service firms generally increase their prices on an annual basis to cover inflationary wage increases and do not reduce them as a matter of course the proposal would be wholly verified but this can not be concluded from the results generated in this research. However the difference in results for increasing prices compared to decreasing them in terms of the importance of the cost of labour supports the assertion that wages are downwardly rigid but upwardly mobile

7. Conclusion

7.1 Introduction

In this chapter the initial reasons for this research will be revisited and key findings summarised. It attempts to draw together all information presented and discuss the overall implications as well as provide suggestions for further research into the price stickiness of service firms and possible related themes.

7.2 Review of research background and objectives

In Chapter 2 the key objectives of this research were given. All of these were related to the way firms in the South African services sector determine how and when their prices are reviewed and changed drawing on previous international studies around price stickiness. The lack of research in South Africa via a survey methodology and specifically targeting services firms was the key motivation for this paper.

The objectives were stated as:

1. Determine whether firms in the services industry follow state-dependent or time-dependent pricing review.

2. Uncover the key considerations taken into account when reviewing prices.

3. To determine whether price review are more dependent on external economic shocks or the competitive environment

4. To determine whether prices are sticky.

5. To determine what differentiators may account for increased levels of stickiness observed in this sector.

7.3 Research Findings

Firms in the South African services sector were largely found to follow a time dependent price review methodology with the majority of firms only reviewing or changing prices once a year. However the proportion of companies which reviewed annually was lower than those in services sectors in previous studies. As discussed this could be due to the difference in the cost of labour in South Africa compared to the other countries where similar studies were run (which were primarily developed markets)

Firms were found to be very inward-looking with regards to setting prices with the key considerations being costs and the management of customer relations. In terms of costs these were primarily composed of labour as is typical of the services sector. Further considerations of price were to do with the financial structure of the company relating to fixed costs and the cost of debt.

Generally firms did not see themselves as being in an industry with a price leader and felt that they had a large amount of independence in setting prices. This is related to the fact that, relatively speaking, price was seen as a secondary factor in evaluating the competitiveness of companies with customer relationships and quality being the most important factors. Firms did indicate that the increased competition over the last decade had increased the frequency of their reviews which does imply a bigger concern over the competitive environment than that given to external economic shocks. Furthermore the minimal amount of cost attributed to raw materials means that an economic shock would have a much smaller impact on cost than that seen in the manufacturing or retail sectors.

The low frequency of reviews combined with the overwhelmingly high proportion of companies which held set regular reviews (rather than in response to specific events) showed that firms were indeed price sticky. The largest overall reasons for this were attributed to co-ordination failure, the need to maintain good relations with customers and that the underlying cost structures did not change that often. Although firms did not attribute their pricing decision to competitor prices this meant that they were more concerned about competitors not changing prices at the same time which led to overall sluggishness in changes.

The factors comparable to other international studies were shown to have a similar ranking of impact on price stickiness in South African service firms. These were: coordination failure, explicit contracts, implicit contracts, and menu costs, in that order.

Menu costs in particular were seen as largely unimportant in the price decision making process largely due to the lack of public visibility of list prices as well as the low frequency of use of information which would reduce the impact of its cost. This was seen regardless of whether the consideration was to increase or decrease price.

Relating to the importance of maintaining good customer relations; the existence of explicit or implicit contracts was consistently stated as a major factor when considering either an upward or a downward price movement.

This was not the case when considering the cost of labour. It was seen as very closely tied to the decision to increase prices. As mentioned above the low frequency of reviews and changes can be closely linked to the annual nature of wage reviews and their strong influence on changing costs. However cost of labour was see as relatively unimportant when deciding to decrease prices which was far more influenced by companies performing poorly either relative to competition (market share) or independently (demand). The difference between the two was attributed to wage rigidities which would lead to a low incidence of decreasing wages (therefore wages would not be considered a factor for decreasing prices)

7.4 Recommendations for future research

This research focused only on South African service firms and could not comment on firms in the manufacturing or retail sectors. As there has been no combined study based on a quantitative survey across all three sectors this would be an ideal evolution of this research. Results seen in this paper could be compared across all sectors and the key differential factors uncovered. This would provide deeper insight into the effect of policy decisions on prices.

Further research could also be conducted on the differing impact of wage rigidities depending on the direction of price change or review. Micro data could be used to determine the actual extent to which companies do decrease their prices as opposed

to increasing them and tied to the changing costs of labour. This would be extremely useful in evaluating the impact of labour policy decisions on prices as well as the balance between unemployment and prices

In addition a cross country study could be run on the impact of labour costs on the frequency of price changes in the services sectors where this is particularly important. This would specifically be useful in evaluating the difference between developing and developed markets and could talk to the possible competitiveness of service industries in developing markets due to their lower labour costs.

7.5 Conclusion

The insight generated from this research has served to uncover the nature of price setting in the South African services sector and unlock possible future avenues of research related to it. The findings were generally similar to those found in the increasing number of international studies providing answers to policy makers looking to influence prices and manage inflation.

In particular this is relevant to the growing amount of research being done on emerging markets where the management of inflation is a primary concern. Although price setting is important to all firms looking to maximise profit the difference between industries, sectors and economies must be examined more closely to effect real change in a specific area.

Finally, this paper has achieved the results it sought to provide and should provide a valuable source of information to those looking to understand price setting in the South African environment and the service sector in particular.

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Appendix A: QUANTITATIVE QUESTIONNAIRE

We are conducting a study on the current price setting practices of South African companies. The objective of this study is to test some of the economic theories on price setting behaviours and to identify possible new trends in how prices are set.

The survey is divided into three sections.

Section A deals with general information about your company and its main products and services.
Section B gathers information on pricing behaviour and factors influencing pricing decisions.
Section C addresses factors that may lead to delays in price adjustments.

Confidentiality Agreement
Your participation is voluntary and you may withdraw at any time. All information provided by you will be kept confidential and analysed at an aggregated level.

If you have any concerns or questions please contact me or my supervisor, our details are as follows:

	Researcher 1	Researcher 2	Researcher 3	Supervisor
Name				
Email				
Contact Number				

EXPLANATION OF SOME IMPORTANT CONCEPTS

Representative Business Line
Since it is likely that your company sells many different types of goods and services, it will be difficult to generalize questions based on each. For this reason, we would like you to consider one of your main business lines when answering these questions.
Furthermore, if your company sells in both the domestic and international market, please answer all questions with specific reference to the South African markets.

Firm or Company
If your firm is a holding company of two or more different types of business, choose the business type that accounts for the largest portion of revenues or for which you feel most comfortable answering questions.

Price
By price we mean the actual transaction sales price, not the list price. Therefore, if discounts from the list price are common in your industry, refer to the after-discount price of your good or service. If you have different prices for different types of customers, base your answer on the most common type of customer.

Surveying Different Types of Firms
The survey is designed to be answered by companies of many sizes in the manufacturing sector of the economy. If you are unable to answer a question, please provide as much information as possible.

Fixed and Variable Costs
Fixed costs remain constant regardless of the volume of production, while variable costs fluctuate with production levels.

Date (Survey collected) _____

Section A: General Information

COMPANY INFORMATION

A1. Company name _____ Phone number _____

A2. Contact name _____ Title _____

A3. What is your company's main product or service? _____

A4. What would you say is the approximate market share of your company's main product or service in South Africa as mentioned in question A3 above?
[ ] < 5% [ ] 5% to 10% [ ] 11% to 20%
[ ] 21% to 30% [ ] 31% to 40% [ ] 41% to 50%
[ ] > 50% [ ] Don't Know

A5. How many types of products does your company currently sell in South *Africa*?
[ ] 1 to 5 [ ] 6 to 10 [ ] 11 to 15
[ ] 16 to 20 [ ] more than 20

A6. How many staff is currently employed by your company in South Africa? (Permanent and temporary) _____

A7. What was the approximate size of your company's turnover in the past financial year?
[ ] < R1m [ ] R1m to <R5m [ ] R5m to R10m [ ] R10m to R50m
[ ] > R50m

A8. What proportion of your sales of your main product is sold outside South Africa?
[ ] 0% [ ] >0% to 10% [ ] 11% to 20%
[ ] 21% to 30% [ ] 31% to 40% [ ] 41% to 50%
[ ] > 50% [ ] Don't Know

A9. What is the main destination of your sales? (choose only one option)
[ ] Retailers/wholesalers [ ] Other private companies
[ ] Public sector/government [ ] Directly to consumers

A10. If you have indicated retailers/wholesalers or other private sector companies in question A9 above, are these companies within your group of companies?
[ ] Yes [ ] No

PRICE FLEXIBILITY

A11. What constraints do you currently face with regards to the prices you set?
[ ] No constraint [ ] Legal/Regulatory [ ] Common International Price
[ ] Parent Company Directive

COMPETITION

A12. How intense is the competition you experience for your main product or service?
[ ] Strong [ ] Weak [ ] None [ ] Don't know

A13. Approximately how many direct competitors do you have in your main market for your main product or service? (choose only one option below)
[ ] none [ ] less than 5 [ ] between 5 and 20
[ ] more than 20 [ ] Don't Know

A14. How would you describe the number of competitors your company faces compared to a decade ago?
[ ] The same [ ] More [ ] Fewer

A15. Is there a price leader in your industry?
[ ] Yes [ ] No [ ] Don't know

A16. When it comes to setting prices, which of the following options best describe your company in relation to your competitors?
[ ] Price Leader [ ] Price Follower [ ] Independent [ ] Don't know

A17. How easily can you find out what the price is that your competitors have set?
[ ] Easily [ ] Not at all
[ ] With difficulty/effort [ ] Don't know / No answer

A18. Different factors can determine your competiveness. What is the importance in your company of the factors listed below?

Factor	Very Important (4)	Fairly Important (3)	Slightly Important (2)	Not Important (1)	Not Applicable (0)
The price of your product					
The quality of your product.					
The degree to which your product can be distinguished from that of your competitors.					
Delivery period					
Long-term relationship with customers					
The after sales service					
Other factors (please specify)					

COST TRENDS

A19. Approximately what percentage of your main product or service costs is variable _____% versus fixed _____ %?

SALES DISTRIBUTION

A20. Which of the following best describes your company's largest share of turnover generated?
[ ] From contract customers
[ ] From non-contract customers
[ ] equal share from both contract and non-contract customers

A21. Approximately what percentage of the sales of your main product or service goes to your five largest buyers, **today**?
[ ] <10% [ ] 11-25% [ ] 26-50% [ ] >50%

A22. What was the approximate sale percentage to the five largest buyers of your main product **a decade ago**?
[ ] <10% [ ] 11-25% [ ] 26-50% [ ] >50%

GENERAL PRICING

A23. Do you have publicly available price lists or posted prices available to your customers?
[ ] Yes [ ] No [ ] Don't know

If you have answered yes to question A23, then answer the following question, otherwise move to question A25

A24. How are these prices lists communicated to your customers?
[ ] Email [ ] Post [ ] Website
[ ] Other, please specify _____

A25. Do your transaction/invoice prices differ from your list prices (i.e. discounted)?
[ ] Yes [ ] No [ ] Don't know

A26. The price charged for your company's main product or service is (choose only one option)
[ ] The same for all customers irrespective of quantities sold.
[ ] Depends on the quantity sold (but accordingly to a standard price list)
[ ] Decided case by case

A27. At what level can the decision be made to discount / vary the transaction price from the list price?
[ ] No deviation to the list price is allowed
[ ] Finance and senior management can approve deviations in extreme circumstances
[ ] Sales managers can approve price changes to facilitate business
[ ] Sales people have the flexibility to alter the transaction price as they see fit on a case by case basis.

Section B: The pricing decision

Some companies often review their prices without necessarily changing/adjusting them afterwards.

FREQUENCY OF PRICE REVIEWS

B1. How frequently do you review your SA selling prices?

[ ] Daily [ ] Weekly [ ] Monthly
[ ] Quarterly [ ] Half Yearly [ ] Annually
[ ] Sporadically [ ] In response to specific event (please specify)
_____

B2. If you answered "sporadically" or "in response to specific event", how many times have pricing decisions been reviewed in the last 12 months? _____

FREQUENCY OF PRICE CHANGES / ADJUSTMENTS

B3. How frequently do you change/adjust the price of your main product or service?

[ ] Daily [ ] Weekly [ ] Monthly
[ ] Quarterly [ ] Half Yearly [ ] Annually
[ ] Sporadically [ ] In response to specific event (please specify)
_____

B4. In the past 12 months how many times have you actually adjusted prices? _____

B5. To the best of your knowledge, has the frequency of price changes/adjustments changed in the **past decade**?

[ ] No, it has not changed [ ] Yes, we change prices more frequently
[ ] Yes, we change prices less frequently [ ] Don't know / Can't remember

B6. If yes, why? _____

CONSIDERATIONS FOR PRICE SETTING

B7. Which of the following methods best describe how you set your prices? (choose only one option)

[ ] By a fixed amount or percentage linked to the current inflation rate.
[ ] We set the price primarily given conditions that have applied in the recent past
[ ] We set the price primarily in accordance with current trading conditions.
[ ] We set the price primarily based on our view of the near future.

B8. How are prices for your main product or service determined? Please rank each of the following statements by ticking the appropriate box on the right-hand side of each statement.

Determining Factors	Very Important (4)	Fairly Important (3)	Slightly Important (2)	Not Important (1)	Not Applicable (0)
Price is made up of direct (i.e. prime or variable) cost per unit plus a fixed percentage mark up					
Price is made up of direct (i.e. prime or variable) cost per unit as above, but the percentage of mark-up is not fixed.					
Price is primarily specified by your principal customer.					
Price is primarily specified by your competitors' price					
Price is primarily determined by a regulatory agency					
Price is set at a statutory level					
Price is based on targeted return on capital/assets.					
Price is primarily determined in other ways (please specify)					

B9. How important are the following factors listed below in terms of causing an *increase* in prices?

Factor	Very Important (4)	Fairly Important (3)	Slightly Important (2)	Not Important (1)	Not Applicable (0)
Not applicable – upward adjustment never takes place (go to Q. B11).					
Increase in cost of labour					
Increase in the price of fuel, raw materials or inputs / components.					
Increase in financing costs.					
Increases in fixed costs.					
Actual rise in demand.					
Expected rise in demand.					
Actual price increase by one or more of your domestic rivals.					
Expected price increase by one or more of your domestic rivals					
Actual price increase by one or more of your overseas rivals.					
Expected price increase by one or more of your overseas rivals					
Significant increase in market share					
Increase in costs arising from regulation					

B10. What other factor(s) not listed above motivate price increases?

B11. How important are the following factors listed below in terms of causing a *reduction* in prices?

Factors	Very Important (4)	Fairly Important (3)	Slightly Important (2)	Not Important (1)	Not Applicable (0)
Not applicable – downward adjustment never takes place (go to **Q. B13**).					
Decrease in cost of labour					
Decrease in the price of fuel, raw materials or inputs / components.					
Decrease in financing costs.					
Actual decline in demand.					
Increase in productivity.					
Expected decline in demand.					
Actual price reduction by one or more of your domestic rivals.					
Expected price reduction by one or more of your domestic rivals					
Actual price reduction by one or more of your overseas rivals.					
Expected price reduction by one or more of your overseas rivals					
Significant reduction in market share					
Decrease in costs arising out of regulation					

B12. What other factor(s) not listed above motivate price reductions?

B13. What effect will the following have on your gross profit margins?

Market Condition	No effect on gross margins	Upward effect on gross margins	Downward effect on gross margins
A rise in market demand for your product			
A rise in domestic competitors' prices			
A rise in overseas competitors prices			

B14. How quickly does your company change prices in response to changes in demand and costs?

Statement	Less than 1 week	From 1 week to 1 month	From 1 month to 3 months	From 3 to 6 months	From 6 months to 1 year	More than 1 year	The price remains unchanged
After a significant increase in demand, how much time on average lapses before you raise your prices?							
After a significant increase in production costs, how much time on average elapses before you raise your prices?							
After a significant reduction in demand, how much time on average lapses before you reduce your prices?							
After a significant reduction in production costs, how much time on average elapses before you reduce your prices?							

INFORMATION USED TO SET PRICES

B15. How frequently is the main information your company uses to form your pricing decisions updated?

[ ] Daily [ ] Weekly [ ] Monthly
[ ] Quarterly [ ] Annually [ ] Sporadically

B16. How current is the information at the time when you receive it?

[ ] real time (no lag) [ ] less than 1 day old [ ] less than 1 week old
[ ] less than 1 month old [ ] less than 1 quarter old [ ] more than 1 quarter old.

EXCHANGE RATES AND PRICES *(the exchange rate refers to the Rand/U.S Dollar. exchange rate)*

B17. Do you import/export intermediate inputs or finished goods?

[ ] Yes [ ] No ***If no, skip to Section C***

B18. Which statement best exemplifies the immediate impact of a rand exchange rate depreciation (the value of the rand decreases against other currencies) on your company's profit margin.

Statement	Tick if applicable
Significant negative effect	
Moderate negative effect	
No significant effect	
Moderate positive effect	
Significant positive effect	

B19. Within the context of margins becoming smaller as a result of a depreciating Rand, please rank the following in order of their importance as a means of restoring margins in recent years.

Option	*1= Most important and 6 = least important*
Increase selling prices	
Shift input to local supplier	
Reduce other input costs	
Increase productivity or volumes of activity	
Reduce other costs	
Other means of restoring margin (specify)	

B20. On average, how often do you increase prices to adjust for an increase in input costs (that is to maintain profit margins) following the depreciation of the rand exchange rate?
[ ] virtually never [ ] less than half the time [ ] about half the time
[ ] more than half the time [ ] virtually all the time [ ] Don't know

B21. How much does the exchange rate have to depreciate before you adjust prices?
[ ] less than 5% [ ] 5% to 10% [ ] 10% to 20%
[ ] 20% to 30% [ ] more than 30% [ ] not applicable/don't know

B22. Are costs associated with exchange rate changes more difficult to pass on to consumers now than a decade ago?
[ ] Yes [ ] No

If yes, why? (Choose all applicable)

Statement	**Tick if applicable**
Competition from domestic sources	
Competition from foreign sources	
Fewer buyers exert more power on our company to keep prices low	
The low inflation environment makes price increases more visible and more difficult to justify	
Other	

If other factors, please specify

_____

_____

B23. During significant exchange rate depreciation, do suppliers reduce their price to offset part of the higher import cost?
[ ] No [ ] Yes, infrequently [ ] Yes, often
[ ] Yes, but I don't know how often.

Section C: Factors leading to delays in price adjustments

This section deals with potential theories as to why price adjustments may be delayed, even though companies may want to increase or decrease their prices.

Statement A: The information used to review (and ultimately change) prices are available infrequently. Therefore, prices may be slow to adjust to new conditions.

C1. Does this statement apply to your company?
[ ] No [ ] Yes, slightly applicable [ ] Yes, very applicable

(If No, Skip to Statement B1)

C2. Has information technology made this factor less relevant over the past 10 years?
[ ] Yes [ ] No

C3. Would your company change prices more quickly or more often if information was available more frequently?
[ ] Yes [ ] No

Statement B1: Companies delay price reductions because they don't want to be the first in the industry to reduce prices.

C4. Does this statement apply to your company?
[ ] No [ ] Yes, slightly applicable [ ] Yes, very applicable
(If No, Skip to Statement B2)

C5. Why does this statement apply to your company? *(Choose all applicable)*

Statement	Tick if applicable
Price reductions may trigger a price war	
If we reduce prices first, new business demand would exceed our capacity	
Lower prices reduce our margins	
We are concerned that the need for a price reduction may be temporary	
Other	

If other, please specify _____

_____

Statement B2: Companies delay increasing prices because they don't want to be the first in the industry to increase prices.

C6. Does this statement apply to your company?
[ ] No [ ] Yes, slightly important [ ] Yes, very important
(If No, Skip to Statement C)

C7. Why does the statement apply to your company? *(Choose all applicable)*

Statement	Tick if applicable
Cannot sell anything above competitors' prices	
We would lose too many customers/market share	
If a competitor increases prices first, customers are less upset with our company	
Other	

If other, please specify _____

_____

Statement C: Prices depend mainly on the costs of labour and raw materials used in producing goods and services. Therefore, prices don't change until costs change.

C8. Does this statement apply to your company?
[ ] No [ ] Yes, slightly important [ ] Yes, very important
(If No, Skip to Statement D)

C9. Are temporary cost increases more difficult to pass into prices than increases viewed as permanent?
[ ] Yes [ ] No

C10. If you foresee an increase in your future costs (such as raw materials), do you *(Choose any of the following)*

Statement	Tick if applicable
Buy in advance and store in inventory	
Hedge against cost increases	
Increase own prices in anticipation	
Take no action	

C11. If you take no action, why? *(Choose all applicable)*

Statement	Tick if applicable
It would antagonize our customers	
We are not confident in our forecasts or estimates	
We are reluctant to take the lead in increasing prices.	
We can easily increase prices when actually required	
Take no action	

Statement D: Companies would like to adjust prices more often to reflect market conditions, but fixed-price contracts make it difficult to pass on price increases when a contract is active.

C12. Does this statement apply to your company?
[ ] No [ ] Yes, slightly important [ ] Yes, very important

(If No, Skip to Statement E)

C13. Do contracts prevent prices from decreasing when demand or costs fall?
[ ] Yes [ ] No

C14. Do you offer discounts on posted contract prices?
[ ] Yes [ ] No

C15. What is the average period of time over which prices are fixed in contracts? _____

C16. Compared to 10 years ago, is this period generally?
[ ] longer [ ] shorter or [ ] the same

Statement E: Companies delay price increases because they have an implied understanding with customers that they will not increase prices in depressed markets.

C17. Does this statement apply to your company?
[ ] No [ ] Yes, slightly important [ ] Yes, very important

(If No, Skip to Question C19)

C18. Does the opposite hold true in strong markets (companies delay price decreases)?
[ ] Yes [ ] No

C19. Please indicate how important each of these factors are as reasons to decide NOT to *increase* the price?

Factors	Very Important (4)	Fairly Important (3)	Slightly Important (2)	Not Important (1)	Not Applicable (0)
The risk is too high that our competitors do not change their prices.					
The risk is too high that we subsequently have to re-adjust our prices in the opposite direction.					
The existence of written contracts specifying that prices can only be changed when the contract is renegotiated.					
The existence of an implicit contract (regular contact with a customer without any written contract).					
The preference for maintaining prices at a certain threshold (e.g. you would rather charge R9.99 than R10.00).					
The costs implied by price changes (e.g. printing of price lists or information gathering costs).					
The variable costs in our company do not change by much with market conditions, making our price quite stable.					
It would antagonise our customers					
Other (please specify)					

C20. Please indicate how important each of these factors are as reasons to decide NOT to *reduce* the price?

Factors	Very Important (4)	Fairly Important (3)	Slightly Important (2)	Not Important (1)	Not Applicable (0)
The risk is too high that our competitors do not change their prices.					
The risk is too high that we subsequently have to re-adjust our prices in the opposite direction.					
The existence of written contracts specifying that prices can only be changed when the contract is renegotiated.					
The existence of an implicit contract (regular contact with a customer without any written contract).					
The preference for maintaining prices at a certain threshold (e.g. you would rather charge R9.99 than R10.00).					
The costs implied by price changes (e.g. printing of prices lists or information gathering costs).					
The variable costs in our company do not change by much with market conditions, making our price quite stable.					
It would antagonise our customers					
Other (please specify)					

FINAL COMMENTS

C21. Are there any other compelling arguments as to why prices adjust slowly? *(Choose all applicable)*

Statement	Tick if applicable
It would be too costly to change prices more often (time, effort, out-of-pocket costs).	
Factors influencing prices do not change often enough to warrant changes.	
Prices could not change more often without disturbing customer relations.	
We are more likely to amend product characteristics (e.g. warranty, delivery lag) than prices.	
Low inflation makes large price changes more noticeable.	
Other	

If other please specify,

,

_____

C22. To what extent do your responses regarding your main product or service also represent your other product lines?

[ ] Mostly representative [ ] Not representative

[ ] Not applicable, company has only one product.

Thank you for your participation in this survey.