CHAPTER 3
Academic debate on Identification of business decline

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CHAPTER 3
ACADEMIC DEBATE ON IDENTIFICATION OF BUSINESS DECLINE

Constructs such as poor management, strategy, environment, and industry structure are in themselves inadequate explanations of new venture failure or success.

Singer (1995:325)

3.1 INTRODUCTION

This chapter outlines and explains the evolvement of warning signs and its field of application. The literature content illustrates the debate on business failure and decline, and the identification of the causes of decline and failure. In addition, the Companies Act (Act 71 of 2008) and, specifically Chapter 6, of the Act incorporate a few demanding prerequisites on the turnaround practitioner's strategic ability. Section 141 of this Act dictates that **"as soon as"** the turnaround practitioner has complied with the liability of data integrity, he needs "… to consider whether there is any **reasonable prospect of the company being rescued** …". In establishing whether a business has a reasonable chance of being rescued, and to be sustainable afterwards, turnaround practitioners need to establish the root cause/s for the decline and distress.

Appendix A reports on early warning signs in detail in categories and by author and serves as a basis for reasoning in this chapter.

Filatotchev and Toms (2006:427) state that the conditions responsible for the financial downturn will have to be mitigated to achieve stability. These "responsible conditions" involve warning sign variables that have to be identified and then stabilised. Grounded theory research on failure opens up a field where combinations of variables in the failure prediction scenario are used as early warning signs. In this study secondary data sources, local and international, were researched in the field of early warning signs.

In terms of turnaround and legal approaches to the investigative field of business turnaround, literature referring to early warning signs is, as a single discussion source, scarce. Early warning sign literature (grounded and other theory) is found predominantly in business failure prediction research theory. Causes of business failure or decline are also quite evident in turnaround theory, although the information tends to generalise the causes of decline. By default, researchers' investigative efforts were based on ex post facto information that had various limitations. It is therefore not surprising to find that, in almost all the literature, early warning signs are identified ex post facto during a post-mortem of the failed business. The ex post perspective is confirmed by Joseph and Lipka (2006:296) in their research on business failure.

Shepherd (2004:253) describes failures as an ex post facto phenomenon which is difficult to subject to longitudinal studies. In reviewing related academic and practitioner literature, the close association between business failure prediction and business rescue is evident. Chowdhury and Lang (1993:8) propose, based on their research and experience, that there is an association between the deteriorating performance patterns and the probability of a performance turnaround. Figure 3.1 illustrates this association as a flow process, from identification to acceptance of decline/distress and the adoption of a turnaround action.

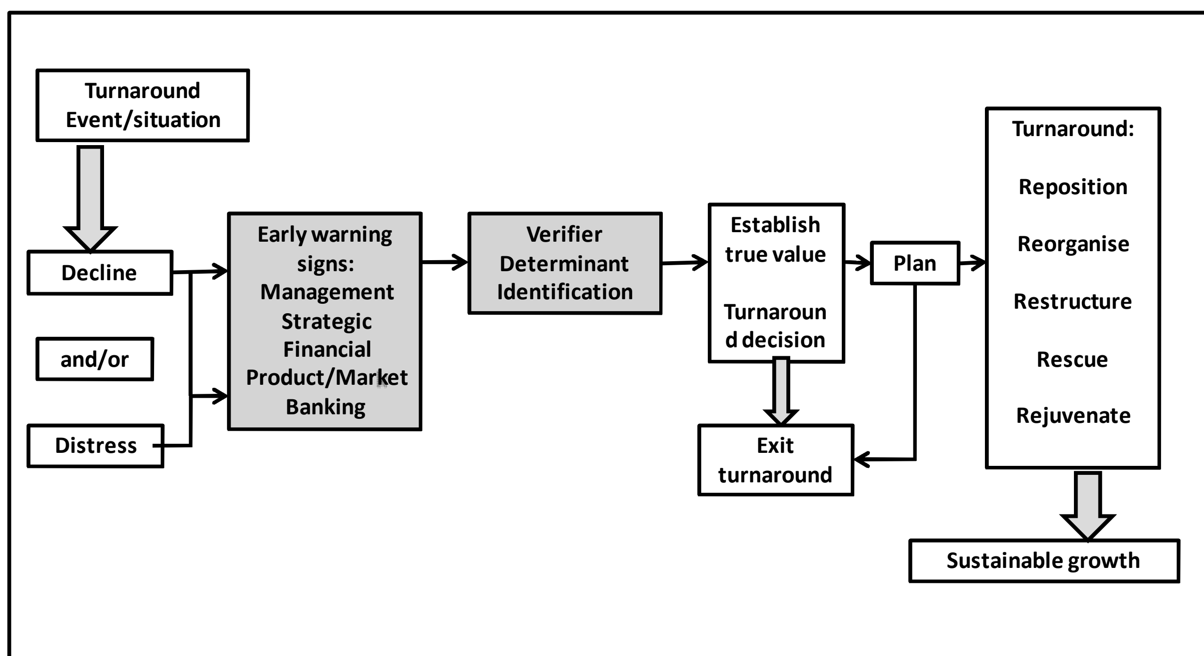

Figure 3.1 Process flow leading up to a turnaround

The prediction of business failure is dominated by quantitative methods, also referred to as accounting methods. Early warning sign theories have evolved from business failure prediction models, for example, Altman's Z-score in 1968, to more sophisticated models in use today. At the preliminary departure point in their search for predictive methodology to prevent business failure, researchers concentrated on failed businesses and focused mainly on quantitative ratio analysis. A need to include qualitative warning signs variables in quantitative research approach was identified. Researchers progressively acknowledge the significance of qualitative variables in failure prediction.

Authors such as Altman (1968), Duchesneau and Gartner (1990), Pant (1991), Lussier, (1995b), Dimitras, Zanakis and Zopounidis (1996), Altman and Narayanan (1997), and Dimitras, Slowinski, Susmaga and Zopounidis (1999) increasingly used non-accounting or qualitative information in their failure prediction modelling. Littler and Sweeting (1987:166) point out that the reliance on qualitative information is a key factor in any business assessment. Qualitative measurements were added to the modelling and new predictive methods such as neural networks, as predictive tools were introduced. Gordon and Langmaid (1988:2) conclude that the research findings of quantitative measurement on its own are not conclusive enough, thereby confirming a hybrid approach which advocates a combined qualitative and quantitative construct. Dimitras *et al.* (1996:487) argue that entrepreneurs should be aware of factors that lead to their business success. The mere absence of these success factors will solicit warning signs.

The same principle applies in the identification of variables for successful or performing businesses. The absence or negative level of these success variables is then categorised as early warning signs. Cameron, Whetten and Kim (1987:135) point out that "comparisons between growing, stable, and declining organisations" indicate that the negative attributes predicted to be associated with decline are actually characteristic of both stable and declining organisations. In addition to literature specifically referring to early warning signs, 1) business failure prediction, and 2) successful versus unsuccessful and performing versus non-performing variables were also researched and included in the greater body of early warning signs literature.

3.2 DEFINITIONS OF ORGANISATIONAL DECLINE

The aim of explaining these working definitions is to ensure the clarity of the relevant concepts for use and measurement in this study.

3.2.1 EARLY WARNING SIGNS

In attempting to formulate a definition for "early warning signs", it is important to follow the development of the debate leading to the phenomenon of early warning signs. Although Altman (1968:596) used variables like "weak" financial ratios as indicators of potential failure, it was Ansoff (1975:23) who used the term "weak signals" to describe discontinuities in organisational strategic change. Amburgey and Kelly (1993:51) conclude that, in a dynamic organisation, change can be both adaptive and disruptive.

Discontinuities do not emerge without warning and Ansoff's (1975:21) concept of "weak signals" is aimed at the early uncovering of the discontinuities or weak signals, to prevent strategic "surprises" which could contribute to an event that will jeopardise the business's continued operations.

The mere existence of various uncertainties requires a sound knowledge of the business's demographics, geography and markets. Knowledge is gathered by scanning the environment in which the business conducts its activities. Once equipped with the required knowledge, using the scanning process will allow identification of early warning signs. Ansoff (1975:26) maintains that weak signals are detected by scanning the organisational environment.

Julien, Andriambeloson and Ramangalahy (2004:254) conclude that, in general terms, weak signals are variables with which the entrepreneur has little contact and of which he/she has little comprehension because of their enclosed idiom and very different concerns. Weak signals can nonetheless present an array of innovative information.

Hills, Shrader and Lumpkin (1999:3) are of the strong opinion that weak signals are predominantly imperative in that they facilitate entrepreneurial thinking "beyond what is known, look beyond what they are used to doing, and apart from the obvious threats, help spot new opportunities for technological innovation". Ilmola and Kuusi (2004:911) conclude the debate on the nature of weak signals. They agree that "a weak signal is, by definition, unstructured information and its implications to the organisation are at an early stage very hard to define". A weak signal represents potential discontinuity, something that the organisation has not interpreted before.

In this context, Cannon and Edmondson (2005:303) argue that the small failures within the business are often the "early warning signs". They maintain that if these early warning signs are detected and addressed, they "may be the key to avoiding catastrophic failure in the future". In order to formulate a definition, this study considers and analyses the elements of the concept of "early warning signs" by applying a synonymous approach to each element.

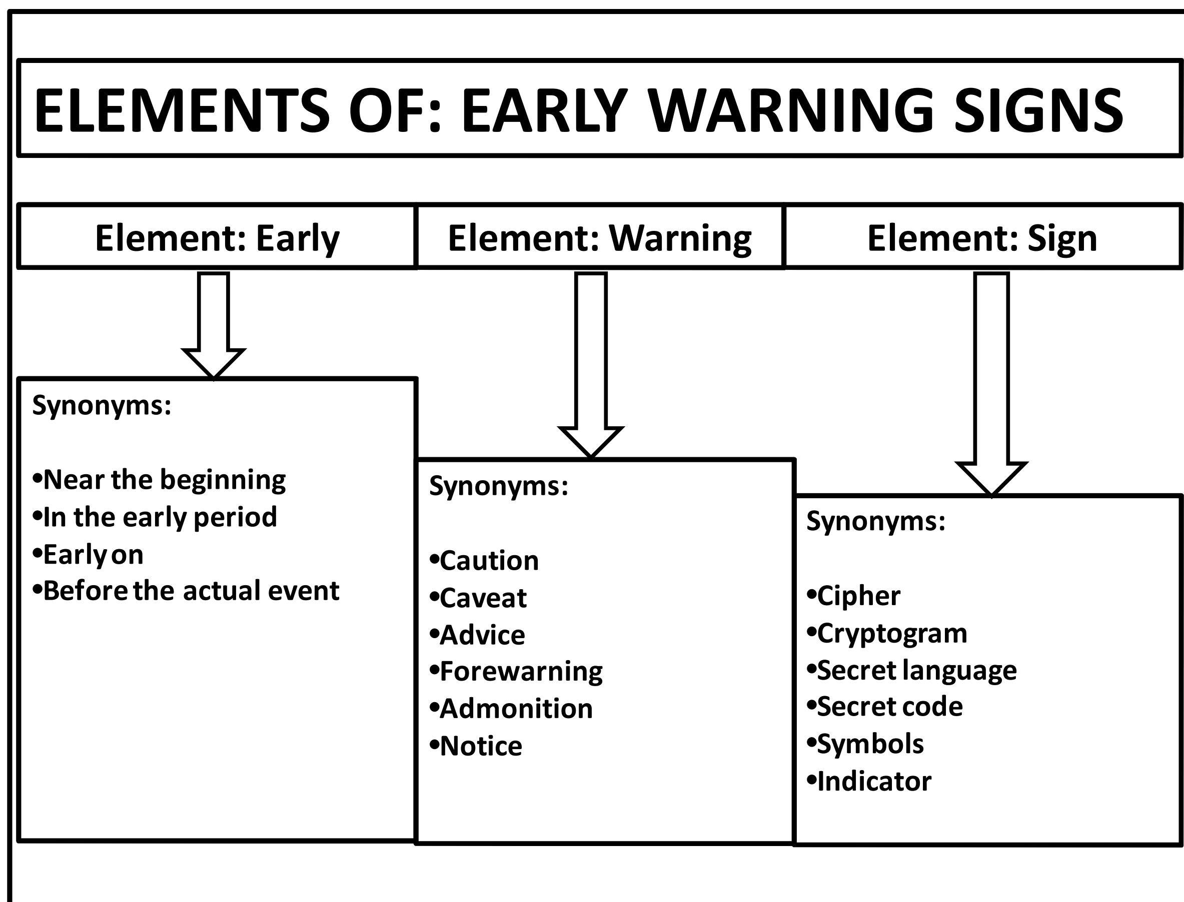

Figure 3.2 Early warning signs – elements and synonyms

The lists of synonyms in figure 3.2 stimulate the thought processes, but also allow the reader to form a comprehensive understanding of the construct "early warning sign". Owing to the preserved vagueness of the elements, it is understandable that entrepreneurs will most probably underestimate the impact of ignoring these signals.

In an interview with the CEO of Syris Investments, Devereux (2010) defines early warning signs as follows: "An internal or external extension of an event or factor or a combination of all, that may directly or indirectly highlight the pending demise of a business or business unit if they are not addressed and rectified in the course of business."

3.2.2 DECLINE

Cameron *et al*. (1987:136) argue that organisational decline represents a substantial reduction in an organisation's resource base occurring over a period of time. Pretorius (2009:10) has drawn a clear distinction between distress and failure by defining "decline" as follows:

> **Decline** – A venture is in decline when its performance is worsening (decreasing resource slack) over consecutive periods and it experiences distress to continue operations. Intervention through alternative management and financial injection could keep it operating albeit not in its current form and depending on the severity of the distress (crisis). Decline is a natural precursor in the process to failure.

Pretorius definition differs from the view of Cameron *et al.* by the inclusion of the argument that the business "experiences distress". The concept of "distress", as defined in the following section will, however, confront this definition with the practicality of the law. For this reason, Cameron *et al.*'s definition of decline will suffice.

3.2.3 DISTRESS

An understanding of the phrase "financial distress" is of the utmost importance in future commercial action. Authors like Fredenberger, Dethomas and Ray (1993:326) discuss the various positions of financial distress. Pindado, Rodrigues and de la Torre (2008:996) conclude that a business is financially distressed in the year following the occurrence of two events. These events are 1) if the earnings before interest (EBITDA), and dividends were lower than its financial expenses for two consecutive years – thus the business cannot generate sufficient funds from its operations to service financial obligations; and 2) conditions in which there is a fall in market value between two consecutive periods

Filatotchev and Toms (2006:408) argue that financial distress is an occurrence where the business is unsuccessful in maintaining its capital, thereby reducing the value of the financial stakeholder's claims. The topic of financial distress is widely canvassed by literature; however; this study accepts the definition of financial distress as formulated in Chapter 6 of the new 2008 Companies Act.

Chapter 6 clearly defines two criteria for financial distress: the business is i) unable to pay its debts and ii) becomes insolvent, but most importantly the Act adds a six-month period in which these events can most likely take place. The unambiguous definition of financial distress presented by Chapter 6 **Section 128(1)(j)** of the Act reads as follows:

> **…** "*financially distressed", in reference to a particular company at any particular time, means that—it appears to be reasonably unlikely that the company will be able to pay all of its debts as they fall due and payable within the immediately ensuing six months; or, it appears to be reasonably likely that the company will become insolvent within the immediately ensuing six months* … .

(Note: certain parts of this section are repeated in chapter 4 for the sake of continuity.)

3.2.4 FAILURE

Various definitions for failure have been formulated over time by academia when faced with the phenomenon of failure. Pretorius (2009:10) has done comprehensive research in formulating a definition of failure which meets the requirements of this study.

> **Failure** – *A venture fails when it involuntarily becomes unable to attract new debt or equity funding to reverse decline, consequently, it cannot continue to operate under the current ownership and management. Failure is the endpoint at discontinuance (bankruptcy) and when reached, operations cease and judicial proceedings take effect.*

3.3 EARLY WARNING SIGNS LEARNING

In reviewing various literature sources, it becomes clear that business failure prediction and early warning signs are closely related. Chowdhury and Lang (1993:8) report on research and common experience that suggests an association between the deteriorating performance patterns and the probability of a performance turnaround. Although consensus confirms this interdependence, few authors such as Cybinski (2001:33) indicate that a failure prediction model could be used as an early warning tool. The apparent limitation of the literature is that researchers failed to link or combine these two constructs.

Balcean and Ooghe (2006:87) conclude that failure prediction experiences various problems attributable “to neglect of the multidimensional nature” of failure. The multidimensional theory suggests that more than one “cause” for decline or failure exists. Chowdhury and Lang (1993:15) suggest three actions: 1) accurate attribution of causes; 2) timely action; and 3) adequate resources, for effecting a successful turnaround. The detail about turnaround plan literature is in itself scarce and the literature researched made little reference to rescue plan support.

Turnaround practitioners are reluctant to part with their knowledge and experience, as they perceive the knowledge base as being a competitive trade advantage.

In defining corporate objectives, Argenti (1969:25) set the following objective, among others: "to ensure our continued survival". It is imperative that businesses survive to ensure benefit to all stakeholders, personnel, shareholders, clientele and suppliers (creditors). Argenti introduces the concept of "stakeholder theory", as he argues that a business cannot have its survival as an objective alone, and concludes that if a business ceases to benefit anyone it will soon cease to survive. Argenti (1969:25) defines the stakeholder approach as follows: "the stakeholder approach' merely asserted that 'companies perform better the more closely they engage everyone affected by their operations'."

The stakeholder theory was, however, later (1997) rejected by Argenti in an article titled "Stakeholder theory – the case against".
In this conclusion, Argenti (1997:445) states that "the stakeholder theory is an idea whose time has long passed". In the South African context, government is, through legislation, putting into practice stakeholder theory. In Chapter 6 of the Companies Act, Section 128(1) defines "affected persons" as shareholders, creditors and employees and/or their representatives. These stakeholders play an important role in the proposed turnaround effort starting with input to, and approval of, the turnaround plan. Altman (1984:171) concludes that the identification of business failure and the early warning signs of impending financial distress are of international importance in individual business performance.

Identifying early distress can lead to timely corrective action. Honjo (1998:566) argues that a new business with sufficient funds can survive a period of negative profits. If a new business wants to borrow funds it will have to convince a lender that profitability and debt repayment are achievable within a certain period. Early warning signs are used in risk profiling of potential debtors, price determination on products, risk assessment of debtors' books, identification of areas where the business is lacking, and a whole host of other applications (Glantz, 2003:16).

Financial institutions are obliged to adopt some form of risk management process, measured against early warning signs. Pousson (1991) and Altman (2003:10) deliberate the point that financial institutions are the most frequent users of early warning sign theory. Financial institutions firstly focus on failure prediction when assessing new loans.

Pousson (1991; 2003:7) and Glantz (2003:17) are of the opinion that early warning signs are used by financial institutions in managing risk through a sophisticated risk-rating process in compliance with Basel II requirements. In this regard, Rose (2009:17) states that a more rigorous evaluation of risk, inherent in product offerings and credit default, is required to understand risk better.

3.4 BASEL EXPLAINED

In reporting on the high (excess) liquidity experienced by European banks during 2004 and the low demand for credit, Tully (2004:54) indicates that banks were making concessions to lower-rated borrowers to win their business. Davey (2004:28), who argues that in order to extend more credit finance brokers reduced haircut requirements to attract and win business, supports this view. She concludes that careful measurement of, among other things, risk management procedures must be engaged.

The Basel Accord refers to the recommendations on banking law and regulations issued by the Basel Committee on Banking Supervision. The main aim of the Accord is to create International standards that banking regulars can adopt. The standard will amongst other, regulate the minimum capital need to set aside for financial and operational risk. The international sub-prime crisis during 2008 and 2009, however, suggests that most banks did not employ adequate risk management processes. Glantz and Mun (2008:1) state: “A key objective of Basel II is to revise the rules of the 1988 Capital Accord in such a way as to align banks’ regulatory capital more closely with risk.”

The Basel II accord aligns the modern credit risk practices of its members and its foundation-based practices require that their estimates be based on the bank's (or capital market) experience.

Glantz (2003:7) argues that one of the main reasons for banks to adopt a credit money model is to estimate the probability of default and loss against default. Aziz and Dar (2004:2) argue that one of the major focuses of the Basel II regulations is to minimise credit risk for the banks: default risk – the inability to repay a loan – being the primary focal point. Basel II sternly divides risk into operational risk and financial risk, while concentrating more on financial risk and thereby affecting credit availability. In an academic response to Basel II, DanIelsson, Embrechts, Goodhardt, Keating, Muennich, Renault and Shin (2001:3) argue that the regulations fail to consider risk as an endogenous factor, applying statistical methods which are inconsistent and place too onerous a reliance on the standard approach to risk rating. Saurina and Truchardte (2004:122) discuss the negative impact of Basel II on small business in the Spanish context. A main concern was the omission and failure to recognise market volatility as an endogenous factor as emphasised by DanIelsson *et al.* (2001:4).

The array of shortcomings forced the Basel Committee to revise the regulations and create a more directive approach in the latest guidelines. Glantz (2003:233, 358), Altman and Hotchkiss (2006:168), Agarwal and Tafler (2008:1), and Glantz and Mun (2008:3) conclude that banks are obliged, under Basel II, to use an internal ratings-based approach to set minimum capital requirements in the measurement of their risk portfolios. Subsequently, the Basel II rules attracted a fair share of criticism, which later prompted change.

Altman (2003:7) confirms the purpose of Basel II, as he states that one of the main reasons for the construction of a credit-scoring model is to estimate the probability of default and loss given default. These risk measurement models prove to be accurate as the allocation of capital is at stake. Blokin and Iyer (2003:1) conclude that, from a risk management perspective, certain borrower characteristics should be incorporated into risk score models.

Banks subscribing to the standardised approach to measure credit risk will use their historical databases to investigate and establish credit risk grading (Basel Committee on Banking Supervision, 2005:98). Consequently, they will compile a unique model for each individual bank, subject to Central Bank approval.

Davis (2009:4) is of the opinion that banks will be under scrutiny by authorities, especially on the way they identify, assess and manage risks. Risks will therefore be subject to close measurement and stress testing. In determining a risk rating on specific credit lending in their portfolios, banks will have to know the risk characteristics to determine possible loss given default (LGD) (Dev, Mingo and Buckler 2009:38). Glantz (2003:311) proposes that once the LGD calculation is done, the loan then be categorised into one of the following risk categories: standard, special mention, sub-standard and doubtful. These categories are used in this research and are further explained in chapter 5.

The Basel II requirements force banks to revisit the capital adequacy linked to the concept of pricing for risk. In line with central bank requirements, risk-rating models in banks were developed that link capital adequacy and pricing to a certain risk band.

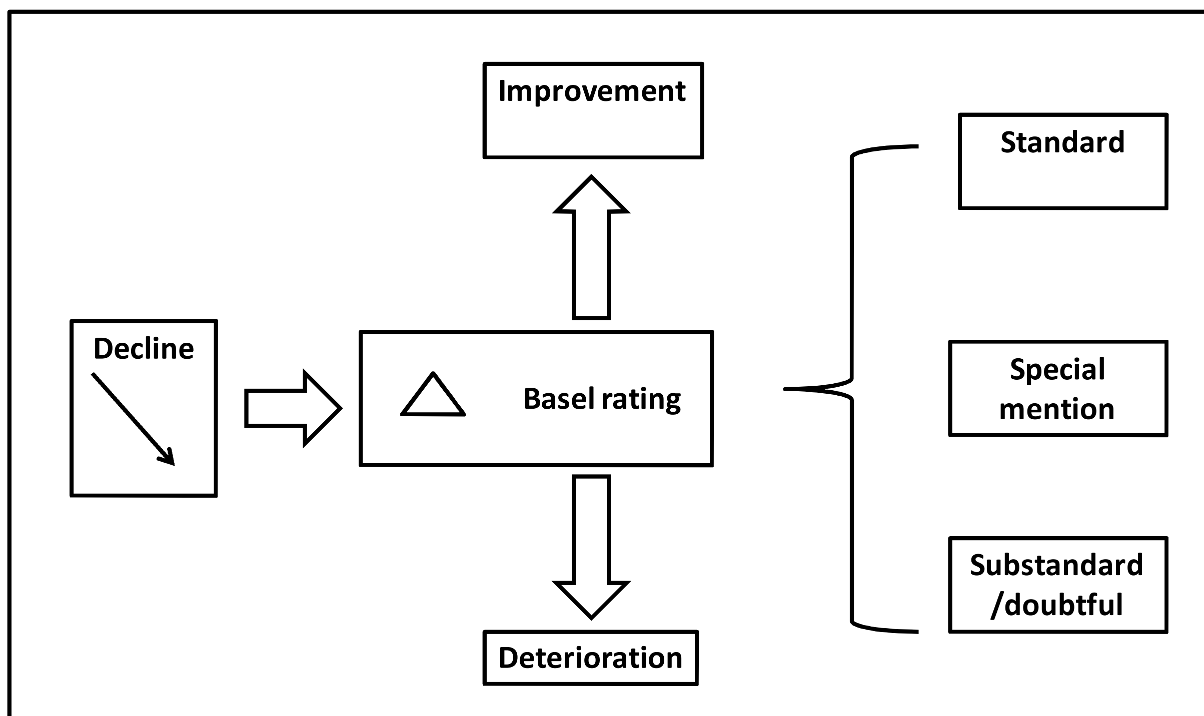

Figure 3.3 Business decline: effect on Basel II rating

The risk rating will have the obligatory effect that, in a period of decline and/or distress, the risk rating will be adjusted in line with the warning signs being triggered, moving the liability into a higher risk category. This effect is illustrated in figure 3.3. The higher the category, the stricter the capital requirements, and if no price adjustment accompanies the risk change, a potential loss situation on a still performing asset for the bank is very real. Banks will thus be forced to increase pricing on distressed or declining businesses. Increased lender pricing is not conducive to turnaround efforts. Chapter 6 of the new Companies Act will, however, allow the practitioner powers to restrict such price adjustments.

3.5 ACADEMIC DEBATE ON ORGANISATIONAL DECLINE

The academic debate on business decline and failure opens with a discussion on the path of decline and failure. Dimitras *et al.* (1996:488) describe the decline and failure of a business as a continuous process, thereby placing even more emphasis on the importance of timely dynamic early warning sign identification systems and turnaround planning in business.

Bruno and Leidecker (1987:51) maintain that the following submissions on decline and failure are valid:

- they happen over time
- identifiable factors are present
- these factors can be used to predict
- once identified these factors can lead to timely corrective action
- these factors can be both external and internal factors and need to be analysed
- poor management associated with these factors will thus be detected
- specific factors will be evident in specific industries.

Hossari (2007:75) distinguishes between decline and failure and argues that the pronouncement of failure is a sudden event.

However, the process of decline could extend over many years and the signs of distress could manifest themselves in many forms. Pretorius (2009:10), who has reported significantly on the differentiating factors of the constructs, ‘decline’ and ‘failure’, supports the distinction drawn by Hossari that companies who do not react to early warning signs create the perception that failure is a sudden event. Ignorance of early warning signs by management will have the effect that the business decline is also ignored, and corrective action is procrastinated until it is too late.

Either companies do not detect early warning signs or, as Burbank (2005:55) argues, the companies ignore signs and then fail without an attempt to implement corrective action. This ignorance emphasises the importance of identifying the variables of decline in a model, which can be used as part of management information systems. Barker (2005:44) states the reality that of “understanding the causes of failure can elude even the smartest manager”.
He discusses two facts as being problematic: the chief problem for managers is to "see" decline and the subsequent problem is to (or at all) react timeously to the decline. This confirms the views of Ansoff (1975:23) in his argument for environmental scanning to grasp the impact of signals.

Historically, from Altman (1968:589) who composed the renowned Z-Score formulae in 1968, researchers used financial ratio analysis as the main input variable for modelling failure prediction. In developing the Z-score theory, Altman focused specifically on predictive modelling using financial ratios, and failed and non-failed company data through a multiple discriminant analysis. However, businesses fail for a variety of internal and external factors and, according to Tang and Chi (2005:246), most studies exclusively use financial ratio analyses as the basis for the study of business failure.

Researchers such as Altman (1968:589; 1984a:177), Argenti (1976:13), Hamer (1983:289), Frydman, Altman and Kao (1985:269), Boritz and Kennedy (1996:512), Tsakonas, Dounis, Doumpos and Zopounidis (2006:452) use financial ratio analysis, multivariate and discriminant analysis and the effectiveness of neural networks. Ahn, Cho and Kim, (2000:66) used economic value add and algorithm techniques to predict business failure.

The predictive power of cash flow projections was later also included in failure prediction theory and Sharma (2001:3) compiled a comprehensive report on cash flow research. In addition, Jooste (2004:171) researched the net impact of cash flows' predictive qualities. The intensity of the difference in net cash generated by operating activities on the cash flow statement compared to the operating profits on the income statement is, according to Kemp (2004:6), a clear warning sign of cash disparity.

Ahn *et al.* (2000:65) argue that failure prediction models can be used as early warning systems and confirm that the variables used in prediction models are in themselves early warning signs. Dimitras *et al.* (1996:512) point out that although neural networks perform well in predicting failure, they are no better than more conventional models such as discriminant analysis and logit probit. McGurr and DeVaney (1998:169) conclude that failure prediction models, developed using mixed industry samples, are not as accurate as would be expected.

This accentuates the limited industrial business population available for research in a South African failure environment. Agarwal and Taffler (2008:1550) use accounting-based ratio analysis to draw a comparison between Altman, Taffler and market-based models, as opposed to the traditional Z-score ratios. They extended their analysis to compare the market shares, revenues and profitability of banks employing these competing models. Their research concluded that the accounting-based research approach has a significant economic benefit over the market-based approach. To stay in line with accounting practices and reporting standards, researchers were forced to adjust their financial ratio analyses to cater for these frequent changes. Altman (1978:30) suggests that the following fundamental elements be included (from the balance sheet) when calculating his Z-score analysis:

- capitalisation of leases
- reserves and contingencies
- minority interests and other liabilities
- captive finance companies and other non-consolidated subsidiaries

- goodwill and intangibles
- capitalised research and development costs
- capitalised interest and certain other deferred charges.

Owing to the very nature and availability of financial warning signs, they are usually the first signs to be investigated. The investigation happens using ratio analysis, and the warning signs that manifest in a distress situation are the following:

- reductions in working capital and cash flows
- increase in fixed and variable expenses
- dropping gross margins
- significant differences between actual and projected results
- poor return on investment
- lack of action on negative variances in budgets.

The main users of prediction models, according to Dimitras *et al.* (1999:263), are usually more confined to financial institutions, such as banks. These models are generally based on historical financial performance and, although acknowledged as important, very little research has addressed "other" warning signs. Altman (1984:175) acknowledges that non-financial variables in business failure prediction are an important measurement in prediction modelling. Some non-numerical signs used by Altman regarding managerial practices are incompetence and inexperience and others such as fraud and neglect.

The authors listed in Appendix A under financial warning signs carried out the most salient work in financial analysis in business failure. Appendix A indicates the name of the author and the period in which the research was conducted. The last column represents the ratios used by the authors in the failure prediction methodology. Sutton and Callahan (1987:406) conclude that it is expected that effective controls will lead to business success.

The failure of a business influences the entire business's existence with a resulting high cost factor and negative impact on related businesss and organisations. Bruno and Leidecker (1988:51) claim, however, that it will be more useful to have knowledge of what "factors" lead to business distress. Appetiti (1984:269) categorises businesses into two distinct categories namely "sound and unsound" businesses. An unsound business is a business that cannot meet its obligations.

This aspect is confirmed in the definition for commercial insolvency in the South-African context (s 339 of the old Companies Act) (Meskin, 2004:666). Section 128(1)(j) of Chapter 6 of the new Companies Act describes "financially distressed" companies as any inference that a company at any time appears "to be reasonably unlikely that the company will be able to pay all of its debts as they fall due and payable within the immediately ensuing six months; or it appears to be reasonably likely that the company will become insolvent within the immediately ensuing six months".

3.6 WARNING SIGNS IN THE LITERATURE

Early warning signs are discussed as all kinds of phenomena of events in business that indicate the potential demise of that business. (Refer to the definition of "early warning signs" arrived at in section 3.2.1). Warning signs are depicted as problems, challenges and poor performance indicators. As such, authors use their own explanation, phraseology or designation. Appendix A is a comprehensive summary of the early warning signs literature.

Pousson (1991) classifies early warning signs largely into the following categories:

- financial warning signs, through ratio analysis
- business and operational warning signs, such as administration, market and product analysis
- managerial signs such as strategic value add and behavioural analysis.
- banking signs, which are closely linked to behavioural signs.
- other, not so frivolous, or behavioural signs.

Robinson and Shell UK Ltd (1986:76) and Watson, Hogarth-Scott and Wilson (1998:237) illustrate signs as "indicators" for good performance, thus decline versus success. Lussier and Pfeifer (2001:236), on the other hand, maintain that signs are variables for comparing success versus failure. Scherrer (2003:53) uses a widely accepted approach to discuss warning signs and typifies them as the "internal (controllable) and external (uncontrollable) cause" of decline.

3.6.1 MANAGEMENT EARLY WARNING SIGNS

In a path of organisational decline, Cameron *et al.* (1987:126) chose to call the warning signs "decline attributes". Owing to their very nature as an underlying feature of a path of decline, these elements are occasionally not acknowledged or addressed as warning signs. Ueda (2004:612) argues that if a banks identifies a bad signal it will result in it believing that the entrepreneur is likely to turn out to be unprofitable.

Very prominent in the literature is the identification of "weak", "poor", or "problematic" management as an early warning sign. It is, however, very difficult to measure problematic, weak or poor management. Substantial debate is evident in the literature as attempts are made by various authors to clarify the phenomenon of early warning signs resulting from mismanagement. Ivanova and Gibcus (2003:17) refer to problematic management as "negative behavioural traits". Back (2005:843), on the other hand, refers to early warning signs as the "focus of financial difficulties and behavioural issues", while Carmichael and Stacey (2006:3) focus on "managerial success variables" such as accountability, initiative, boundaryless thinking and integrity. Bates (2005:345) focuses on the "skills set" of owners and managerial "success variables" as warning signs. Some authors, such as Moy and Luk (2003:207), refer to early warning signs as "obstacles" and "problem types" for growth. In their article "The insolvent customer", the Credit Research Foundation (2004:11) reports that in a recent turnaround appointment in Canada, the turnaround team's assessment of the companies' affairs indicated that the main contributor to failure in the company was "poor management".

Miller (1977:44) identifies four "management syndromes" of business failure. They are the impulsive syndrome, stagnant bureaucracy, the headless business and swimming upstream. Hence, when planning a turnaround, the turnaround practitioner thus needs to assess the management style of the entrepreneur. Consequently, it may be deduced that, as there are many definitions and descriptions of early warning signs, a working definition is desirable.

One of the main threats to business viability is management and/or directors who contemplate fraud. In line with this, Bower and Gilson (2003:20) state that fraudulent underreporting of expenses (and other financial performance measures) result in extremely high costs in order to rectify the position. Fraudulent business practices are not limited to misrepresentation but also include statutory non-compliance. Mueller, McKinley, Mone and Barker (2001:25) maintain that, in the process of rationalising the causes of organisational decline, management must form an opinion on the stability of those causes and debate them. This is, however, a constricted, simplistic view of early warning signs.

Singer (1995:325) concludes that "constructs such as poor management, strategy, environment, and industry structure are in themselves inadequate explanations of new venture failure or success". Early warning signs shaped from a focus on the skills set of owners contemplate, according to Lussier (1995a:8), "non-financial business success versus failure variables".

Banfield, Jennings and Beaver (1996:94) focus mainly on the up-skilling of management, addressing need and demand. Three broad management areas that need to be monitored were identified in Grant Thornton's catalyst issues (2004a:1). These are finances, operations and strategic planning. In the broader sense these essential aspects need to be dealt with by the turnaround practitioner and entrepreneur's business and strategic turnaround planning.

Beaver and Jennings (2005:12) describe the management process as a progression which has highly personalised preferences, prejudices, attitudes, skills demand, and technical and educational needs. They also focus on control by the bureaucratic and hierarchical environment over critical decision making. Management plays a

significant role in identifying and disclosing early signs of decline. It is, however, clear that when early warning signs begin to appear, the business is already in a sub-normal situation. Gilmore, Carson and O'Donnell (2004:349–357) refer to those situations (where early warning signs appear) as "risky situations".

Some authors suck as, Nutt (2004:13), Franks and Sussman (2005:30), Fraser (2005:448), and Cressy (2006:113), debate fortune as playing a part in the failure of a successful business; this phenomenon is described by Elenkov and Fileva (2006:135) as "bad luck". By contrast, Harvey (2002a:3) concentrates on examining the "value-creating potential of primary activities" as early warning signs.

Pretorius (2008:412) discusses 1) human causes associated with failure in the context of early warning signs; 2) internal and external causes associated with failure; and 3) structural causes associated with failure. These causes relate to the poor execution of business functions, of which Cameron *et al.* (1987:128) have identified various "dysfunctions" of business decline.

These dysfunctional areas include reluctance to change, scapegoating, low morale and conflict. Koellinger *et al.* (2007:520) investigated entrepreneurial behaviour, characterised by overconfidence. This author maintains that identifying distress warning signs in the business in good time is crucial if an attempt is to be made to save the business. Family businesses have their own set of problems, which are grouped in a separate set of early warning sign factors. These are, according to Morris, Williams, Allen and Avila (1997:388), conflict within family circles, centralised decision making and accountability. Sargeant (2005:21) discusses early warning signs as "fundamental turnaround problems" in family businesses.

3.6.2 FINANCIAL WARNING SIGNS

Financing pressures, such as cash flow shortages, necessarily affect the way the entrepreneur deals with the identification of warning signs. Discussing the external funding of a business, Brooks (2002:25) argues that industry investors step back and allow management the freedom to run the business. These types of investor expect

management to stick to the (pre-approved) business plan, meet financial objectives and be able to pay dividends. This approach has the potential to force management to ignore some "important dynamics" in the business.

McRann (2005:38) identifies seven short-term key signs that indicate that a business may be in trouble. They are:

- declining sales
- reduced market penetration
- falling profit margins
- thin earnings before income taxes
- high employee turnover rate
- increasing customer complaints
- high-level employee dissatisfaction and defection.

The above-mentioned warning signs, although stated as separate issues, have a severe impact on cash flow liquidity. Platt and Platt (1994:117) conclude that failure is caused by a variety of events, including poor planning during the development phase, a restricted capital base and poor managerial abilities.

3.6.3 BANKING WARNING SIGNS

In a banking environment, lenders, especially as the main transactional banker, will have the added benefit of being in a position to observe banking warning signs. With the enhancement of technology, the entrepreneur has access to his venture's bank accounts online. If proper risk-monitoring systems are in operation within the business, the entrepreneur, through the risk management system, can be alerted to heed banking warning signs. Banking warning signs are treated by most authors, such as Pousson (1991), Bibeault (1999) and Glantz (2003), as industry specific, with only lenders having a vested interest. A comprehensive literature research of banking early warning signs was done in this study and a summary of the findings is attached as Appendix B.

Bibeault (1992:369) reports on the slowness in the banks' visitation programmes, which in itself is a dysfunction of a bank's own risk monitoring and not an early warning signs as such. Banks tend to have behavioural monitoring and scoring as an early warning sign approach. According to Back (2005:844), this approach is based on historical behaviour and patterns and is mainly used to predict future behaviour. These behaviour patterns include prior payment behaviour, payment delays and payment disturbances.

Glantz (2003:237) proposes a different approach to the behavioural patterns by adopting a more practical approach. He investigates the cash cycles of the business by using the transactional bank account history to establish how effectively cash is managed in the business. Entrepreneurs can use this method to evaluate their own cash cycles and detect warning signs in terms of cash management. Banking warning signs should not, however, be seen in isolation, as they are usually visible in conjunction with other signs.

3.6.4 OTHER EARLY WARNING SIGNS

Holtz-Eakin *et al.* (1994:55) examined the phenomenon of why some individuals survive as entrepreneurs and others do not. The results of their research are consistent with the notion that liquidity or cash flow constraints have a noticeable, if not severe, impact on the viability of an entrepreneurial enterprise and its ability to survive.

Platt and Platt (1994:117) conclude that failure is caused by a variety of events, including poor planning during the development phase. Arogyaswamy, Barker and Yasai-Ardekani (1995:507) are of the opinion that the strategic orientation will be determined and varied by the causes of the business's decline. As Platt and Platt (1994:126) report, some smaller businesses fail as a result of the failure of larger related businesses, for example, in the agricultural industry. According to Singer (1995:313), some entrepreneurs may start their business with some imperfections, such as those related to production.

These imperfections will grow with the business but can unexpectedly surface at a critical point, negatively affecting business performance.

The literature research confirms the views of Okuzumi (1990:62) that designated organisational change is often a cause of business failure. In the rationalisation and change process, psychological pressure is created by organisational decline. Mueller *et al.* (2001:27) believe that entrepreneurs need to accept that they can learn from failure (heed the warning signs). Baunard and Starbuck (2005:283) discovered that learning from repeated success makes future failure very likely; consequently, they focused on small business failures and investigated the power and influence of the entrepreneur.

Kotter (2008:21) refers to the entrepreneur’s position after consecutive periods of success as entering a state of complacency. The entrepreneur’s euphoria at success can be overwhelming. Amburgey, Kelly and Barnett (1993:52) discuss early warning signs as problems in strategy promotion, while Li and Sun (2008:870) focus on financial distress prediction using “case-based reasoning”.
Although case-based reasoning is a new concept, no subsequent reference to it was found in the literature. It was found that decline, distress and failure in the various stages of a business’s life cycle have attracted a lot of attention from researchers.

Comprehensive research was done by Romanelli (1989), Mjaro (1992), Bates (2002), and Burbank (2005), to determine where, at a point in time in their life cycle, businesses are more likely to fail. Pompe and Bilderbeek (2005:867) distinguish between new, “young” and old businesss and conclude that there is no significant difference in the life cycle stage. They qualify their research by highlighting the difficulty in obtaining predictive information from young businesss. Appendix A reflects various authors who identify the specific ‘point’ in the business life cycle where an event occurs that is a contributing factor to decline, distress and failure.

The process of managing constructs such as innovation and change creates a factual challenge in recognising early warning signs through the business life cycle. Strategic association is evident in life cycle theory and growth strategies.

Growth, specifically excessive growth, also referred to as overtrading, can appropriately be described as the silent killer. Concern with low growth is real and evidenced very early in the cycle, but excessive growth is not as comprehensible. Thus, the euphoria of a growing business overshadows strategic planning for sustainable growth.

3.7 SUMMARY OF EARLY WARNING SIGNS

Seminal work on early warning signs has been largely summarised by academics such as Cannon and Edmundson (2005), Collard (2002), Hass and Shepherd (2005), Lohrke *et al.* (2004), McGurr and DeVaney (1998), Moncraz and Kron (1993), Pretorius (2009), Sharma (2001), Sharma and Mahajan (1980), Stead and Smallman (1999) and Tang and Chi (2005).

The logical deduction is that the authors use the following terminology too arbitrarily to apply them to describe “early warning signs”:

- success versus failure variables
- causes of decline and or failure
- warning indicators for business decline
- performing and non-performing variables
- root causes for decline or failure
- warning indicators
- material defects
- external and internal factors
- distress variables
- problems
- challenges.

Sudarsanam and Lai (2001:183) suggest “that [the] success of managerial responses to performance decline is conditioned by their timing”.

Through managerial and entrepreneurial intervention, business structures can use business turnaround plans to great advantage. Sreenivas (1997:25) identifies business types associated with low and high failure rates. The classification of warning signs made by Pousson (1991) are largely confirmed by this literature study and the case research discussed in chapter 6 of this study. A real-life case research, conducted with a sample of credit specialists in a banking environment, identified various early warning sign categories.

Five main categories were identified by academics in the literature research and are summarised in table format, with the heading "Early warning signs", and attached as Appendix A. Appendix A reflects an analysis of the literature from 1968, when Altman (1968) focused on the modelling of financial ratios in his most famous Z-Score formulae, to date.

Early warning signs identified in the literature are categorised into the following main categories: management, strategic, financial and product/market. Banking signs are not discussed by most authors (refer to Appendix A), as this topic clearly industry specific and favoured by authors researching financial institutions. Owing to their importance, banking signs are reflected separately in Appendix B.

3.8 INTRODUCTION OF VERIFIER DETERMINANTS

The importance of analysing the early warning signs of business failure in their entirety is thus essential when a turnaround is proposed. It is a well-established fact that warning signs are generally ignored when the business is still a going concern. Ex post facto investigations into the causes of failure and decline are most prominent in the postmortem phase of business assessment. The academic debates clearly failed to "drill down" into the micro warnings and were mostly content to stop at the macro identification of warning signs. This leads to vague and open-ended descriptions such as, among others, 'poor', 'weak', 'dysfunctional' 'unsuccessful' and 'unfocused' management.

The same argument applies in the case of strategy, product, market and financial factors. In a financially distressed turnaround situation macro warning signs are easily observable; it is the micro warning signs that have to be verified by the turnaround practitioner.

Improved reliability can be obtained by building early warning verifier determinants into the strategic business plan to 'verify' warning signs, possibly through a regular update, to ensure appropriate corrective action. Observations may contribute by condensing the timeline during which early warning signs are identified. As this research and thesis focus mainly on the early warning signs, their causes and the identification of verifier determinants initiating the causes, previous theory is listed according to the timelines and early warning signs identified. For a full schedule of the timeline approach and early warning sign methods used, refer to the schedule attached as Appendix A. A conclusion can be drawn that the causes of decline and/or failure are clearly identified and well researched.

The words 'verifier' and 'determinant' are combined in the term 'verifier determinant'. These words are subsequently subjected to investigation with regards to meaning, denotation and common understanding. In order to formulate a definition, this study considered and analysed the elements of the term 'verifier determinant' by applying a synonym approach to each element.

The lists of synonyms in figure 3.4 stimulates the thought process, but also allows the reader to form a comprehensive understanding of the constructs of 'verifier' and 'determinant'. The term 'verifier determinant' is most probably better described by the French words *confirmer déterminant*. The meaning of verifier is to confirm, validate and make sure that the early warning sign identified is in fact present. Determinants reflect the agreement or consensus of the warning sign verifier.

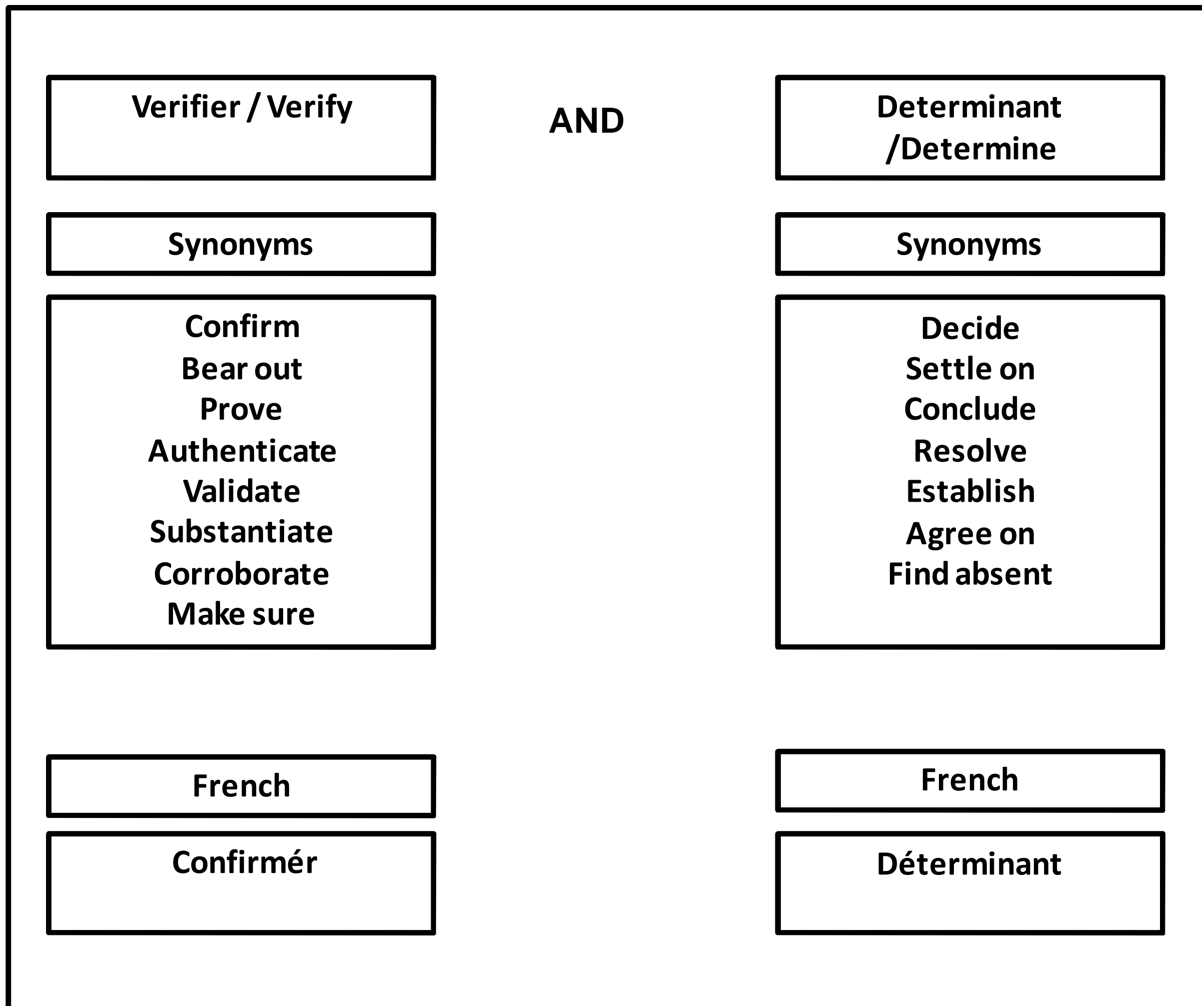

Figure 3.4 Synonyms of verifier and determinant

A verifier determinant is defined as the 'root' indicator that validates the cause, which underscores/concludes the early warning sign (see figure 3.5). In chapter 1, 'early warning sign' was identified as a construct and 'verifier determinants' as the elements of this study.

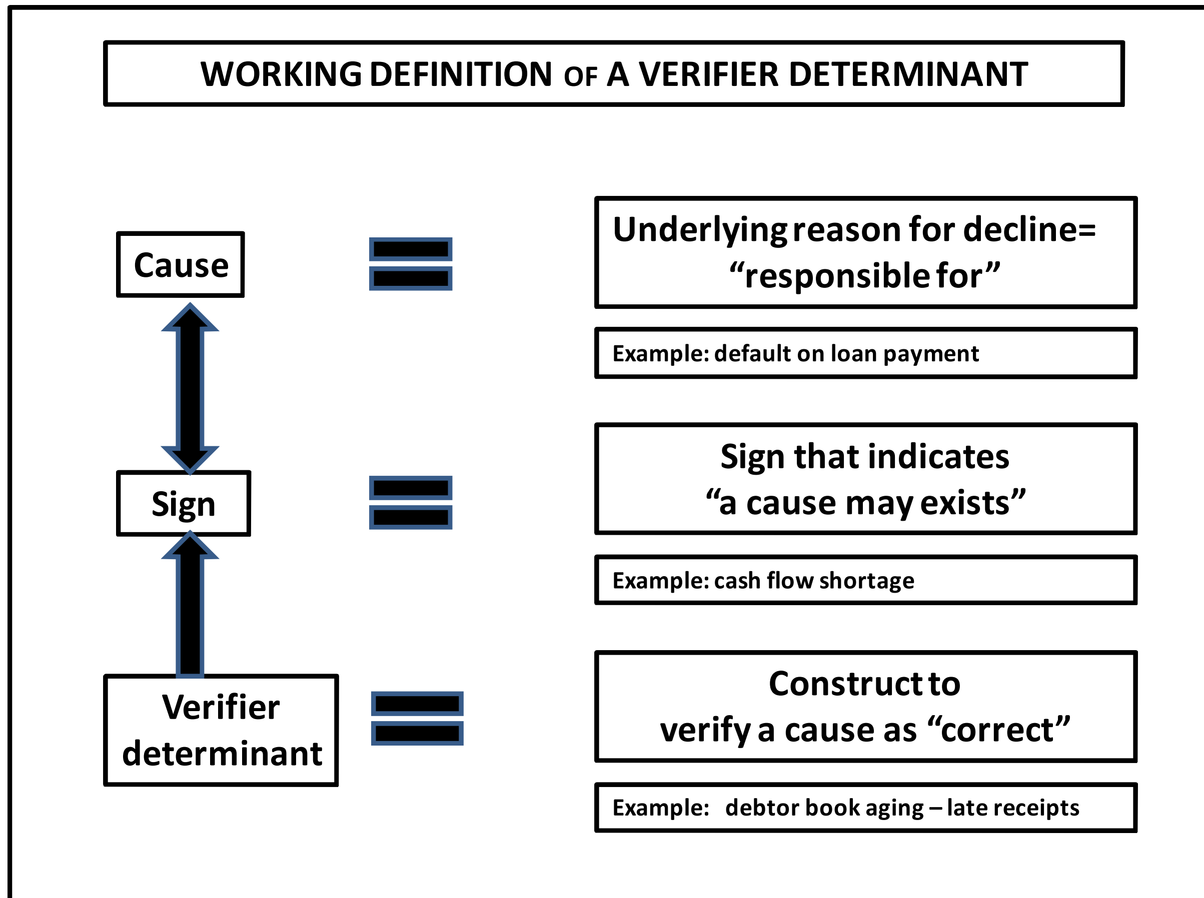

Figure 3.5 Working definition schema for verifier determinant

It is of great importance to establish the true value of the business in the early stages of the turnaround process. Verifiers can be used successfully to determine the extent of the problem ('depth of the rot'), the difficulties concerned and the severity of the problem. When verifiers are used, the time constraints inherent in a turnaround situation can be alleviated by assisting to assess the real situation quickly. Verifiers will lead to a better understanding of the cause of decline or distress and will be beneficial to managers/owners and personnel in coping with the psychological effects. If identified correctly, verifiers will be the key variable when deciding if a turnaround is feasible or not.

Owing to a better understanding of the business through the identified verifiers, the ultimate cost determination of a turnaround could be accomplished in a relatively short period.

The most important part verifiers need to play is to prevent decline and distress in businesses. Used as a longevity based management tool, verifier determinants can contribute to the day-to-day management of a business.

Verifier determinants and the sequence of events

When a business starts to decline in performance, early warning signs change from being invisible to becoming visible, because of their mostly qualitative nature. The application of verifier determinants is used to confirm the veracity of the early warning signs – at the same time reducing the period of the turnaround and its effect on the decline. Later, the verifier determinants can inform the turnaround plan.

3.9 CONCLUSION

Recent research serves to reiterate, consolidate and summarise the seminal work of earlier authors, such as Altman (1968), Argenti (1969; 1978; 1997), Miller (1977), Al-Bazzaz and Grinyer, (1980) Mayes and McKierman (1980), Hamer (1983), Anderson and Zaithaml (1984), Cameron *et al.* (1987) and various others (see Appendix A). Once a variable has been identified as an 'early warning sign', it is not subject to change. The variables were, however, subjected to name changes, as the authors attempted to put a unique or personal touch on them.

The only unpredictable constituent of early warning signs is how management respond to the appearance of the sign. In assessing the academic debate on early warning signs, it becomes evident that authors use various terminologies and descriptive writing to explain the causes of business decline and/or failure.

This chapter suggested a working definition, of a verifier determinant, in this study, which is derived at by using the same approach used to arrive at a definition for early warning signs.