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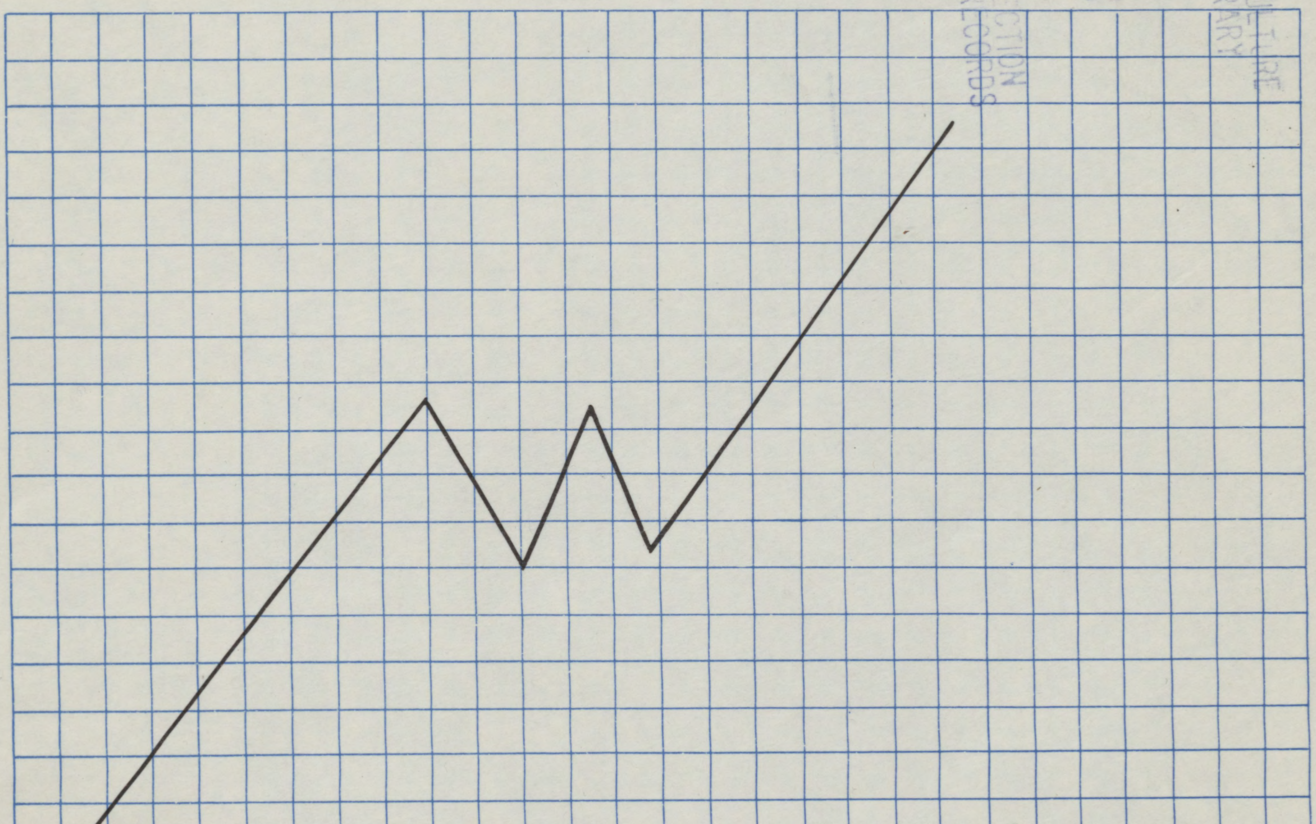

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BUSINESS GROWTH IN AGRICULTURE. I: A THEORETICAL APPROACH*

by

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1. INTRODUTION

As a result of the cost-push inflation to which agriculture has been subject during the past few years the survival and growth objectives of agricultural enterprises have been highlighted more and more. Both survival and growth objectives make judicious financial and enterprise management more critical. The aim of this series of articles is to identify the factors affecting enterprise growth, to draw up a decision-making model for business growth and to evaluate the effect of different strategies and variables on business growth. The aim of this article is to discuss the most important aspects of growth (and survival).

The managerial goals of a firm may change as it moves through its life cycle of establishment, growth, consolidation and transfer. During the life cycle an enterprise and more particularly in the growth and consolidation phases the entrepreneur comes up against numerous internal and external factors which either threaten the enterprise's continued existence or create additional opportunities. Management, and more specifically efficient financial management, is the key to the survival or successful growth of the business. Financial management strategies are therefore the subject of this article.

2. FIRM GROWTH

The decision-making process and the handling of internal and external cash flow are two important aspects of business growth. Growth amounts to the gaining of control over additional resources and services by paying less for them than they earn for the firm. Funds are obtained from internal or external sources to purchase these resources.[1]

Business growth involves changes in the resources (capital, labour and land) being managed. The pattern of changes may be measured by means of physical and financial norms. There may be considerable differences between results measured by these criteria. Changes in net value may for example be more gradual than physical growth owing to the discrete nature (lumpiness) of inputs such as land, machinery and buildings. Obtaining land, machinery and other durable assets has no immediate effect on net value, but does change the size, structure and liquidity of assets and liabilities. The degree of change is determined by the extent to which assets are obtained by means of credit, own cash sources or leasing.

In the dynamic analysis of business growth no production resource can be considered fixed. Resources are obtained over time in that they are financed from annual income and loans. To obtain growth, surplus cash after farming expenditure, family consumption and other commitments must be obtained unless loans are negotiated. Growth is maximised if net cash income is maximised in the short term. Financial growth strategies must be considered the most important factors determining growth. Enterprises must therefore be chosen which will maximise the availability of funds for reinvestment.

According to Penrose[2] growth's "primary meaning (is) that of a process in which an interacting series of internal changes leads to increases in size accompanied by changes in the characteristics of the growing object". She further describes growth as an "increase in size or improvement of quality as a result of a process of development".[3]

3. BUSINESS STRATEGY

The need for business strategy arises from the need to adjust to a rapidly changing environment. Technological development, increasing competition, rapid economic growth, inflation and other factors place a considerable premium on the ability of the firm to anticipate changing conditions and adjust to them. A firm's strategy is therefore an important factor determining its future.

Although a firm's goals involve certain performance targets, more specific guidelines are necessary for growth and survival. These additional guidelines are known as business strategy. Ansoff[4] considers a firm's strategy "the concept of a firm's business" and strategy involves both the goals and

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decision rules and the guidelines needed to achieve these goals. It is therefore a dynamic concept which indicates the action to the taken. A valid strategy will realise growth, maximum profit, survival or any other goal or group of goals. By planning and implementing an effective strategy management can ensure the future of the firm.

Strategy must therefore be in line with a firm's critical resources, its capabilities, objectives, planning horizon and vulnerable areas. It must also be workable and aim at measurable results.

A growth strategy may be seen as the best method of achieving the goals of profit and/or survival. There are various ways in which a firm can grow. It can grow internally or externally, horizontally or vertically, or it can diversify. The firm must decide where, how and when it wishes to grow. This is all part of the total decision-making process which constitutes business policy.

A planned strategy can be of value only if note is taken of the present and potential capabilities and resources at the firm's disposal. The basic resources are of importance, namely physical facilities (land, buildings, equipment and stocks), human resources (managerial ability and labour force) and financial resources (funds, including credit facilities and credit reserves).

Strategic financial decision-making involves investment and financing decisions. It therefore concerns the availability of sufficient suitable funds at the right time and includes both the composition of funds (financial structure) and timing in obtaining funds, as well as the correct expenditure and investment of available funds.

The following is required of an effective growth strategy:[5]

- The firm's managerial capacity must be in proportion to the growth in other resources (land, labour and capital).
- The firm must have profitable control over additional capital sources. This control can be classified according to the type of control (ownership, leasing) and type of resource (land, depreciating assets and operating assets). Ownership and leasing generate cash flows over a period of time which may be evaluated in terms of their effect on the firm's profitability, risk and liquidity. Durable assets may be owned or leased.
- Business and financial risks must be managed efficiently.
- Income and other tax obligations must be managed.
- The business must eventually be transferred to new ownership and management. The strategy must make provision for this.

An essential distinction must be made between strategic and tactical decision-making. Barry[6] differentiates as follows: "Strategies are considered durable courses of action that seek 'long-run' attainment of objectives, together with the means for coping with chance events and unforeseen actions of others beyond the firm's control. As such, strategies contrast with the more frequent, predictable and even routine, tactical decisions of daily business operation."

4. RELATION BETWEEN GROWTH AND SURVIVAL GOALS

Drucker[7] states that management goals such as profitability and growth are secondary to the goal of survival. Although these goals may frequently be pursued simultaneously there are times when a choice must be made between them, and when the survival goals came first.

Decisions must not be aimed only at growth since this may reduce the ability to survive. Any firm must therefore aim at an improvement in its survival capacity. Healthy growth is an important prerequisite for an improvement in a firm's survival capacity.

Every business decision affects a firm's ability to survive. No commitments should be incurred which could possibly overload the firm's resources. The determination of strategy does not only involve the dangers to be avoided but also the opportunities to be identified and utilised.

"Growth itself provides a defensive strategy for gaining cost reducing efficiencies that enlarge the firm's risk capacity and strengthen its competitive position. Moreover, enlarging the firm's management capacity and flows of information about its internal performance and external environment provide for more precise evaluation of risks."[8]

Growth must take place within the scope of the financial management capability of a business otherwise survival will be endangered. According to Cohn and Lindberg[9] what is involved is "an increase in survivability and profitability". Any risks taken must therefore be "safe risks" which improve survival capacity on the one hand and increase growth potential on the other.

5. FACTORS WHICH MAY AFFECT GROWTH AND SURVIVAL

Internal and external determinants may be identified in the growth process.[10] Internal determinants are under the direct control of the decision-maker and include financial management strategies, family goals, internal capital rationing and family consumption. The decision-maker may alter land and labour availability, introduce and change debt restrictions and change buildings, livestock, equipment and stocks. External determinants of growth are not under the direct control of the decision-maker. These include input prices, product prices, taxation, availability of production inputs, technological changes, inflation, institutional restrictions, windfall profits and weather conditions. Unexpected family expenditure as a result of illness and injury may also occur. These determinants could possibly be changed by better timing in respect of decisions, but cannot be controlled. They can stimulate or restrict growth and must therefore also be considered the greatest problem which may hamper growth.

5.1 Goals formulated by the entrepreneur

Goals form the guidelines for policy formulation, planning and organisation, direction, co-ordination and control. They are decisive in determining action and are also a guideline to determine the nature, extent and direction of action.[11] The establishment of goals is therefore an inseparable part of the firm's activities and is in fact decisive to its performance and even its continued existence.

Ansoff[12] puts it as follows: "Objectives are decision rules which enable management to guide and measure the firm's performance towards its purpose." In order to ensure the long-term existence of the firm, goals must therefore be acceptable, accessible, motivating, simple and, where possible, measurable. The setting of goals is therefore a continuous process.[13]

Management goals react to the manager's age and the stage of the life cycle reached. The manager has different goals in the establishment, expansion and consolidation phases. A firm growth model must therefore attempt to accommodate these changing goals during the firm's life-time.[14]

5.2 Managerial ability

"Managerial ability of the farm operator was the major factor, among those considered in the study, determining the rate of growth of the farm firm."[15] This quote immediately indicates the importance of managerial ability in firm growth.

In growth it is essential that managerial capacity increase in direct proportion to managerial requirements.[16 20] Managerial shortcomings are restrictive, especially in the case of a one man business. When greater managerial capacity is acquired, more intensive control over the performance of the firm is possible. This control causes a flow of information which may increase the firm's flexibility in coping with changing conditions. This could lead to higher income, reduced risk and greater growth. In general, growing firms specialise and decentralise the management function[21] and a wider range of managerial services not economically viable in the case of sole ownership may be employed.

Efficiency of management is determined by the individual's ability to evalutate the relevance of problems and to make the stages in the decision-making process efficiently operational, viz formulation of goals; collection and analysis of information; the making and implementing of decisions; acceptance of the results and control over the firm's performance.

Morris[22] has shown that as a result of characteristics inherent in him, the farmer with average managerial ability will not be able to grow. According to him the following managerial characteristics restrict growth:

- lack of growth ambition
- lack of profit maximising motive
- lack of growth expectations
- unwillingness to accept risk
- lack of information and training
- other managerial shortcomings, e.g. as regards marketing knowledge, financial management ability and efficient production, and the inability to forecast prices accurately.

5.3 Availability of resources

Business growth makes greater demands on the firm's human and natural resources. The quality and quantity of the managerial capacity must increase and additional labour must be hired. A complement of durable goods must be added. In addition the firm's access to capital must increase in order to make provision for control over more productive resources.

5.4 Risk and uncertainty

According to Johnson[23], Boehlje & White[24] and Harshbarger[25] it appears that yield variation leads to a lower growth rate than constant yields. Risk as a result of price and yield variations may lead to higher production costs. Boehlje & White[26] quote Hicks[27] as follow: "As planned size of the firm increases, the possible losses become greater .... this increasing risk factor .... evidently is quite capable of bringing expansion to a stop." A more detailed discussion of risk and uncertainty appears in a later section.

5.5 Other determinants of growth

- Growth is a process over time and there are costs involved in this growth process in that a demand arises for additional managerial services for the acquisition of new knowledge. Additional costs in terms of new roads, buildings, etc. in the initial stage must also be taken into account.
- Differences in the characteristics of resources affect growth, e.g. increases in the values of land, buildings and machinery are seldom the same and are not always clearly reflected in market prices. Different assets are also listed separately in tax returns.
- Minimum initial size, availability of own capital and loan repayment conditions may affect the establishment and expansion of farming firms considerably.
- Profitability of the firm leads to the availability of cash for reinvestment.
- Institutional environment, technological change and inflation may affect growth. They may either stimulate or restrict growth and their effect is beyond the control of individual managers.

6. STRATEGIC COMPONENTS OF FINANCIAL MANAGEMENT

The strategic components of financial management may be manipulated for business growth and survival. The effectiveness of manipulation is to a large extent determined by the financial manager's ability. Reynders[28] sums up the task of the financial manager as follows: "Financial management involves determining the capital requirements of the firm and the optimum attraction and utilisation of financial resources in the pursuit of the firm's goal and within the framework of its policy." (translation)

6.1 Financing policy of a firm

Any financing plan is limited by the principles of profitability, liquidity and solvability.

Profitability

Profitability is the percentage ratio of the profit earned during a specific period to the capital employed to make that profit. From an agricultural economic viewpoint net farming income (NFI) per R100 of capital investment (with no interest costs deducted) indicates profitability. This is the profitability of the business distinguished from profitability of equity capital investment viz NFI less interest payments (and lease costs) in respect of debt capital, expressed as a percentage of equity capital. If profitability of equity investment is higher than the profitability of the business this points to the profitable use of debt capital and positive financial leverage.

The method of financing which ensures the highest return on equity capital should be sought. This is, however, affected by the period for which funds are needed and the cost of debt capital. From a profitability viewpoint, financing is aimed at adjusting the period of availabity of funds to the period of utilisation.

Liquidity

Liquidity may be described as the continuous ability of the firm to make all payments deemed necessary for the continued existence of its activities on time and to obtain the means to utilise possible opportunities of expansion. It concerns the balance between the inflow and outflow of funds in the short term.

A clear distinction should be made between business liquidity and operating liquidity. Business liquidity is a static concept which indicates the liquidity at a specific time and is deduced from the ratio of current assets to current liabilities. This is the current ratio. For agriculture there are not yet any fixed guidelines. Operating liquidity indicates the liquidity during a specific period of time and is deduced from the ratio of existing and inflowing liquid funds on the one hand and operating expenditure (including debt redemption) on the other. It is unrealistic to look only at business liquidity because this makes the unrealistic demand that the firm should at all times have sufficient liquid funds at its disposal to cover all expenditure. Operating liquidity seems a more dynamic and acceptable approach for agriculture and may be deduced from the cash flow statement.

Solvency

Solvency concerns the ratio of equity to debt capital and implies the extent to which the debt capital in a business is covered by its assets.[29] The importance of the role played by debt capital depends on the security and privileges which it enjoys, but also on existing own funds, the nature of the firm's profit expectations and the type of debt capital. When measuring solvency it must therefore be ascertained whether the cash flow will be adequate in the long term to carry debts, to cover interest and payments, to make the eventual repayment of debts possible and at the same time to lay the foundations for future attraction of new funds. There is therefore a close correlation between liquidity and solvency. Whereas liquidity deals with the short term, solvency relates only to the long term. Both have to do with the cash value of the firm, however.

"How much debt capital the firm will be able to attract from the point of view of solvency, depends on its financial solidness, viz its profit potential and, together with this, the degree of probability that its total capital will remain untouched."(translation)[30] In the short term the liquidity of the firm is probably of more importance than its solvency. A firm's debts may be larger than its assets, but it may still continue to exist if it has sufficient liquid assets. This phenomenon is fairly common in agriculture.

6.2 Financial leverage and business growth

The growth rate of a firm is often restricted by its ability to finance growth. The more rapid the growth desired in a farm firm the less readily can growth be financed from within the firm (internally). The firm's most suitable growth rate is, according to Linke & Hopkin[31], determined by the business risks of the firm, investment opportunities available, financial markets, the cost of capital to the firm and the entrepreneur's attitude to risk.

The crux of growth is to obtain control over additional resources supplying incomes larger than their costs in order to increase the value of the firm. Savings which are reinvested may lead to a greater net worth and increase the future income-generating capacity of the firm. The firm is therefore interested in obtaining capital to finance growth at a low cost, with due regard to liquidity and risk. Debt and equity capital are claims on the firm's assets. A number of strategic dimensions are found in the capital structure of the business. One dimension is the financial leverage i.e. the ratio of equity to debt capital and the effect of various combinations of these on the cost of capital. According to Reynders[32] the leverage result from the fixed commitments entailed by the use of debt capital. This means that a given change in the profit prior to deduction of interest will lead to a proportionally larger change in the profit after deduction of interest. A positive leverage prevails as long as the average business profitability (NFI per R100 of capital investment employed) is larger than the cost of debt capital; leverage is negative in the reverse case. Theoretically a firm requires a combination of debt capital (D) and equity capital (E) (as expressed in the financial leverage rato D/E) which is such as to minimise the average cost of capital.

7. RISK MANAGEMENT

The farm firm comes up against two kinds of risk, namely financial and business risks. Business risks are the risks inherent in the nature of the firm. They arise mainly from the instability of yields and product prices, the possibility of rising costs and the level of fixed costs. Nelson *et al.*[33] defines business risk as "the variation in net earnings arising out of the kinds of enterprises in which the firm is engaged". The choice of enterprises is determined by the entrepreneur's risk preferences, and the expected yields and variations in them, as well as his financial ability to carry greater risks. Farmers wishing to avoid risks will prefer enterprises with lower average incomes and smaller income variations.

Financial risks arise from the fixed nature of costs associated with the use of borrowed funds. "Financial risk is the probability of incurring relatively greater losses as the proportion of borrowed capital relatively to equity capital increases."[34] Substantial fluctuations in the return on equity capital may result from relatively small fluctuations in firm profitability because of the magnifying effect of the financial leverage. In addition there is also the risk that it will be impossible to meet fixed commitments under unfavourable economic conditions.

As expansion occurs by means of borrowed capital, any variation in expected yields will lead to an increase in the potential loss of equity capital. The greater variations arise from the fixed contractual obligations associated with interest payments and liabilities. An additional source of financial risk is associated with the loss of liquidity as loans increase.

An entrepreneur pursuing a high growth rate by means of a high leverage ratio usually has considerable loan repayment commitments which have a negative effect on liquidity. The decrease in loan capacity, new redemption obligations and the acquisition of fixes assets all tend to lower the firm's liquidity. It should also be borne in mind that there is a cost involved in liquidity. The higher the level of liquidity the higher its cost. Liquidity and the leverage effect should therefore be taken into account together in financial decisions.

What leverage ratio would be desirable is not so clear when risk is taken into account[34]. In the absence of risk, higher leverage levels are very attractive. In the presence of risk the level of risk relative to the expected growth rate must be taken into account. Especially during conditions of inflation and drought it is necessary to place emphasis on the potential losses arising from high leverage levels rather than on the potential advantages, even if the probability of both is equally great. A tendency to take risks or an unwillingness to accept risks may dominate investment behaviour.

The leverage incentive decreases because declining marginal utility of money reflects greater utility in respect of the avoidance of loss than in respect of the obtaining of profits[35].

The result of the abovementioned risks is the entrepreneur's increasing need for liquidity in order to counteract uncertain expectations and meet financial commitments. As debt capital increases, so the firm's liquidity decreases. The leverage and liquidity principles are therefore interdependent and must be taken into account together in growth and survival strategies.

Effective tax management also plays a major role. The growth - conscious entrepreneur should study his farm records and tax situation to see whether tax obligations can be decreased by better planning, record keeping and analysis. The aim is not to minimise tax payments but to maximise after-tax profits.

The financial risk a firm is able to bear is determined mainly by the level of business risk inherent in the firm's activities. According to Nelson *et al.*[36] the combined effect of business risk and financial risk is contained in the principle of increasing risk. Business and financial risks in a firm should therefore be thought out thoroughly.

A farmer wishing to concentrate systematically on business growth therefore needs a detailed evaluation of the business risks to be able to determine to what extent financial risks may be incurred. The uncertainties regarding prices and yields in agriculture place a considerable damper on financial risk incurred and therefore on the growth of the business.

Many of the methods used to increase growth rates expose the firm to greater risks. The principle of increasing risk in respect of debt capital and the new conditions of redemption, decreased loan capacity and investment in fixed assets, reduce liquidity. Growth through leasing maintains liquidity but increases lease risks, and decreases growth.[37]

Effective risk management helps to stabilise the growth rate in that it affects the ability of the business to cope with fluctuations in yield. The implementation of a risk management programme depends to a certain extent on the firm's sources of risk, management preferences in respect of risk and the choices of risk management.

8. CAPITAL RATIONING

The term "capital rationing" is usually used in a situation where there is a restriction in respect of the funds which may be invested during a specific planning period[38]. Such financial restrictions are usually found when rapid growth occurs, when technology changes rapidly and requires efficiency, and specifically in capital-intensive enterprises, where a large and possibly non-optimal proportion of assets are financed internally.

Credit suppliers are sceptical about too high leverage levels and react by increasing loan rates or by refusing further loans. This is known as external capital rationing. External rationing of capital may occur because credit suppliers traditionally supply loans on the basis of the valuation of assets (security) and not on the basis of ability to repay. When loans are granted on the latter basis they are far more likely to be in proportion to management limitations, and rates of interest and sizes of loans may be adjusted accordingly. If capital and cash budgeting procedures are worked out, this could lead to more rational investment decisions since it will supply important information to both credit supplier and borrower.

Internal capital rationing takes place when an entrepeneur's internal resistance to debt leads to his not fully utilising the debt capital sources at his disposal. He does not wish to misuse the financial leverage thereby increasing his financial risk. More credit leads to less credit reserve and less room for manoeuvre. Unused loan capacity gives the entrepreneur the same room after manoeuvre as cash. Entrepeneurs may also regard retained funds as free of charge in comparison with the interest cost on debt capital. The entrepreneur therefore prefers to invest retained cash rather than debt capital. The farmer wishing to grow must, however, accept the role of debt capital in financing growth, he must be prepared to increase it, to manage it and to live with it. The farmer has also always placed a high premium on liquidity as a result of the fluctuations in annual income. Its importance may however decrease if risks are managed better. Internal rationing of capital usually leads to slower growth or no growth at all.

CONCLUSION

The growth and survival aims and strategies in a firm are interdependent. Various financial management strategies which may affect both growth and survival may be introduced and manipulated, including the leverage principle, tax management, cash management and planning, leasing and ownership of resources and cost saving strategies. Both the quality of financial management and the management of business and financial risks may have a great effect on growth and survival.

Cash flow problems frequently cause serious growth and survival problems. The cash flow budget may be identified as one of the most valuable aids both in prosperity and in adversity. Strategic advance planning in respect of unforeseen circumstances is essential to effective decision making. Increased productivity and greater cost awareness may ensure growth and survival.

The South African agricultural entrepreneur will to an ever increasing extent have to evaluate, plan and implement strategies for various circumstances in order to survive and to grow.

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