



“Exploring Firm Behaviour as a Cause and Consequence of Financialization”

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ABSTRACT

This paper sets out to explore financialization from the perspective of firm behaviour. It looks at how financialization has become predominant in the global economy and how firms have adopted financialization as an accumulation regime. Considerations are made whether firm behaviour or changes in firm behaviour have propagated financialization or whether the rise of financialization on a global scale has influenced firms to become more financialized. From the research in this paper, it appears that financialization has in fact influenced firm behaviour, and the increased adoption of financialization by firms has led to its rise and predominance. We can see that under financialization, firms or large corporations tend to become financial holding firms as they shift from traditional production to dealings in financial transactions for gains, adopting a “downsize and redistribute” technique.

1. INTRODUCTION

In the past few decades, there have been a lot of changes that have been observed in most economies worldwide. One notable change has been the rapid growth of the financial sector globally. This rise in the role of finance in the world economy has prompted research into its effects on the global economy, i.e. wages and economic growth at a macroeconomic level and corporate behaviour at a microeconomic level. This rise in the importance of finance has been referred to as financialization. Most literature on financialization considers corporate behaviour in the context of the “financialized firm”.

In this research paper, we hypothesize that firm behaviour is a consequence of increased financialization, which has led to its predominance. We set out to investigate whether the macroeconomic predominance of financialization has micro foundations by investigating firm behaviour and exploring the microeconomic and macroeconomic theory around financialization.

Fine (2012, p. 557) provides an extensive definition of financialization as “the phenomenal expansion of financial assets relative to real activity (by three times over the last 30 years); the proliferation of types of assets, from derivatives through to future markets with a corresponding explosion of acronyms; the absolute and relative expansion of speculative as opposed to or at the expense of real investment; a shift in the balance of productive to financial imperatives within the private sector whether financial or not; increasing inequality in income arising out of the weight in financial rewards; consumer-led booms based on credit; the penetration of finance into ever more areas of economic and social life such as pensions, education, health, and provision of economic and social infrastructure; the emergence of a neoliberal culture of reliance upon markets and private capital and corresponding anti-statism despite the extent to which the rewards to private finance have in part derived from state finance itself.” This provides a very broad and extensive definition of financialization which is not, for the purposes of this paper, a suitable definition. It is worth noting, however, that Fine’s literature on financialization explores socio-political theory (or rather, takes its influence from Marxist perspectives) around financialization and its effects on society, which is relevant in the investigation of financialization within the South African context.

In this paper, the term financialization refers to “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies.” (Epstein 2005, p3). One must note that this definition is broad and encapsulates most of the definitions of financialization that have been postulated in preceding theory.

The definition as set out above by Epstein allows us to use the term financialization in various contexts to explain different economic phenomena. For example, Magdoff & Sweezy (2008) use it to explain the apparent stagnation in the US economy; while Palley (2007) uses it to explain poor economic performance, unemployment and income inequality.

However, it is important to note that there are limitations to the financialization theory as spelt out by Christophers (2015). Christophers (2015) notes that there are analytical and theoretical limits to financialization theory with most of these limits arising from the apparent lack of coherence in the literature. Christophers (2015) makes the consideration that there are three spheres to financialization which are centred around three themes: (a) the financialization of capital, which is concerned with the process of capital accumulation and profit generation; (b) corporate motives and governance, which explores the growing importance of shareholder value; and (c) expansion of the sphere of the influence of finance, which explores the reaches of financialization in daily life and its cultures and identities such as debt and credit.

This paper aims to draw a link between the microeconomic and macroeconomic theory surrounding financialization. In order to achieve this, we set out to explore firm behaviour

as a cause and consequence of financialization. In the next few sections we will start by exploring the link between Post-Keynesian microeconomics and macroeconomics by observing the behaviour of the firm, then we will explore the macro-micro link of financialization in Kaleckian economics and then we shall explore financialization and corporate behaviour in the context of the modern Post-Keynesian firm. We shall then consider how shareholder value orientation has affected the investment decision of the firm or rather, how the rise in shareholder value orientation has affected corporate behaviour; then we shall consider some empirical evidence of financialization by investigating some notable contributions to the empirical literature around financialization; and lastly, briefly consider the case for financialization in the South African Context.

2. THE MICRO-MACRO LINK IN POST-KEYNESIAN ECONOMICS

In this section we shall explore the macroeconomic and microeconomic links in the Kaleckian perspective on economics. This section is essential in identifying the channels through which financialization passes through the economy both from a macroeconomic and microeconomic perspective (which is discussed in greater detail in the subsequent sections). In Post-Keynesian economics investments and profits by firms occurs at a macroeconomic level whereas income distribution and profit share between capitalists and labour are microeconomic.

We shall briefly consider the type of firms being discussed in the Kaleckian context. When exploring financialization, it is important to firstly understand the type of firms that we are taking into consideration, the markets in which they operate and the limitations of these firms. In the Post-Keynesian perspective, it is important to note that firms operate in

imperfect markets, which means that the market tends to take more of an oligopolistic or monopolistic structure. This assumption that firms operate in an oligopolistic market also alludes to the size of the firm being observed in Post-Keynesian economics, which is large. Eichner (1976, p. 3) investigates what he terms the “megacorp”, exhibiting several characteristics, namely “(1) the separation of management from ownership, this leading to a different behavioural pattern from that usually assumed in pricing models, (2) multi-plant operation with fixed factor, or technical, coefficients, this producing a different set of cost curves, and (3) membership in at least one oligopolistic industry, this giving rise to a different type of revenue curve for the individual firm.”

The assumption that firms operate in oligopolistic markets implies that firms have influence on pricing. Harcourt (2006) points out that there are two principal forms of price formation:

1. Marshallian market-determined prices for raw materials; and
2. Mark-up pricing for industrial products

Since, we have established that the firms in question are inherently large and have power in the markets in which they operate to influence their prices, we shall now move on to establish the links between the microeconomic narrative and the macroeconomic narrative in Post-Keynesian economics by first considering the problem of income distribution in Post-Keynesian economics, then we shall consider the relationship between investment, profits and national income in the Post-Keynesian perspective. After discussing the relationship between investment, profit and income, we shall then consider the decision between growth maximization versus short-run profit maximization for the Post-Keynesian firm and finally consider power as an objective for growth by the firm.

a. Income Distribution in Post-Keynesian Economics

In this section, we shall explore the problem of income distribution between wages and profits. In the Kaleckian perspective, the distribution of income has microeconomic foundations. Kalecki's approach, as outlined by Feiwel (1975), differs from that of the neoclassical approach in that he does not utilize marginal productivity in his argument. Kalecki assumes that markets are imperfect and observe an oligopolistic structure.

Feiwel points out that there are essentially two theories of distribution in Kalecki:

1. The short-run theory of distribution connected with the controversial notion of the 'degree of monopoly'; and
2. The theory that workers spend what they earn and capitalists earn what they spend.

From the latter proposition is derived the conception that the rate of profit on capital is governed by the rate of investment and the propensity of profit-earners to save. Kalecki's theory of income distribution provides a microeconomic account of the theory of output and distribution. In postulating this theory some key assumptions are made:

- i. Supply is elastic and firms operate below their point of practical capacity;
- ii. Surplus capacity is a typical phenomenon in manufacturing;
- iii. Imperfect competition, that is, firms have market power and can influence prices;
- iv. Cost curves are not U-shaped and instead observe Sraffa's "footsteps";
- v. In light of uncertainty, firms do not attempt to maximize profits

Since firms are assumed to operate below their point of practical capacity, capacity underutilization is a typical condition and short-run prime unit costs per unit of output can be assumed to be stable. Feiwel points out that Kalecki justifies this assumption by “acknowledging that unit prime costs tend to fall somewhat in many instances as output increases” (Feiwel, 1975, p. 93). This would then imply that firms observe increased returns in the short run.

We can note that Kalecki’s assumption of constancy of the unit prime costs is based on the following:

- a. Short-run marginal cost curves are usually almost horizontal over the relevant range of production; and
- b. Marginal costs are mainly composed of non-overhead wages (w) and the cost of materials (cm). The resultant change in cost from producing an additional unit with a given and not fully utilized plant is made up of the sum of short-run cost of overheads (o), wages and cost of material. That is to say that,

$$MC = w + o + cm \quad (1)$$

- c. The cost of overhead for manual labour and materials usually accounts for only a small proportion of the total cost of these cost components, within variations in the scale of output and can thus be treated as negligible. This implies that,

$$MC = w + cm \quad (2)$$

The above relation holds within the relevant range and below the point of practical

capacity.

Now we shall then consider the determination of prices by firms. Assuming the following definitions:

p price per unit of output – $(u + s)$

m raw materials cost per unit of output

} u – unit prime costs

w wage cost per unit of output

o overheads per unit of output

} s – unit gross profit

r profit per unit of output

The mark-up over unit prime costs can be represented as $(p - u)/u$, that is, the excess of price per unit of output over the unit prime costs. The mark-up can thus be expressed as the gross profit margin $(o + r)/u$ and alternatively it can be expressed as a coefficient of prime costs, $p = ku$. Rewriting this, the relation can be expressed as,

$$(p - u)/u = k - 1 \quad (3)$$

The mark-up depends on numerous variables such as the process of industrial concentration, the vigour and weaknesses in competition, market imperfections, industrial setting, the morphology of markets, the degree of freedom and constraints in price-setting and on income distribution. The determination of the mark-up is governed by the firm's price-fixing policy in relation to price formation in an industry. The determination of the mark-up contributes to the distribution of national income, which in turn affects spending

propensities and the degree of utilization of resources. We can see that the mark-up arises due to the degree of monopoly in an industry.

“With surplus capacity and constant prime cost over the relevant range of output, the firm fixes the price of its product, taking into consideration mainly its prime costs per unit of output and the prices of other sellers in industries that are producing similar products.” (Feiwel, 1975, p. 97) Feiwel relates the mark-up over prime costs as an increasing function of P_a/p which implies that the lower p is in relation to P_a , the higher the mark-up that will be fixed.

Kalecki’s analysis then moves from a single industry to the manufacturing industry as a whole. Revenue from the sales of an industry’s output (T) is composed of prime costs (U) (which consist of labour prime costs (W) and basic costs of raw materials (M)) and gross profits (S) (which consists of overheads (O) and profits (R)). Hence revenue can be expressed as,

$$T = W + M + O + R \quad (4)$$

In the relation above, gross profits are equal to the excess of an industry’s sales revenue over its prime costs, that is, $T - (W + M)$. Equating the sales value of an industry’s output to $K(W + M)$, where K is the proportion of sales value to the prime costs, we obtain the following:

$$\text{Gross Profit} = (K - 1)(W + M) = O + R \quad (5)$$

This implies that the gross profit is equal to the product of the amount of prime costs and

the mark-up coefficient. Value added by an industry can be estimated as the difference between the sales revenue and the cost of raw materials ($T - M$). Thus, the value added by an industry is equal to the sum of wages and the gross profit. It can be expressed as follows:

$$T - M = W + O + R$$

$$\Rightarrow Y_1 = W + (K - 1) (W + M) \quad (6)$$

Now expressing the labour share of income, we obtain,

$$W/Y_1 = W / (W + (K-1) (W+M)) \quad (7)$$

$$\Rightarrow W/Y_1 = 1 / (1 + (K-1) (1+M/W)) \quad (8)$$

The relative share of wages in the net output is determined by the degree of monopoly and by the ratio of the raw materials bill to the wage bill. We can see that the degree of monopoly determines the distribution of net output between wages and profits, given the relation between the cost of materials to the wage bill. From equation (8), we can see that the wage share in net output is a diminishing function of the degree of monopoly and the proportion of prime costs spent on raw materials. Kalecki then concludes that the principal determinants of the share of wages in gross domestically produced national income are:

1. The degree of monopoly;
2. The ratio of prices of raw materials to unit wage costs; and
3. The structural composition of the value of gross income of the private sector.

From the discussion in this section, we can see how in the Kaleckian perspective, a

macroeconomic problem of income distribution contains microeconomic foundations. The labour share in income is determined by the firm's ability to fix prices (degree of monopoly) and the ratio of prime costs allocated for raw materials, which are microeconomic outcomes.

b. The Relationship Between Investment, Profits and National Income

In this section we shall consider the relationship between investment, profits and national income. Kalecki's theory of profit determination and investment is based on the principle that wage-earners do not save but spend what they get paid and that the capitalists get what they spend. This implies that "profits are determined by investment and not investment by profit" (Feiwel, 1975, p. 112) and that "profits are determined by the profit-earner's propensity to consume and investments undertaken by them in the past." (ibid).

As discussed in the preceding section, wages share in income is determined by the degree of monopoly and hence, wages can be determined by factors underlying income distribution, such as the degree of monopoly. In formulating his fundamental equation for profits, Kalecki considers a closed economy. This is done for the simplification of the model. In his assumptions, Kalecki distinguishes between the two classes, workers and non-workers (that is, the rentiers and capitalists) and assumes that wages, salaries and profit all-together make up national income. Propensity to save varies between the two classes with non-workers having a higher propensity to save since the propensity to save out of profits is greater than that of saving out of wages. Kalecki's assumption that workers do not save allows him to equate profits to the sum of gross investment and capitalist's consumption. We know that by definition, gross income is equal to the sum of gross private investment and personal consumption,

$$Y = I + C \quad (9)$$

Furthermore, considering that the income of labour consists of salaries and wages (which can be denoted as V) and the income accruing to capitalists is in the form of profits (denoted P), we can express income as a sum of the two in the closed economy,

$$Y = V + P \quad (10)$$

However, it is important to note that investment in fixed capital cannot be the sole important component of investment. The impact of unexpected accumulation and reduction in inventories also seems to have been exaggerated. Furthermore, investment and consumption have to be expressed in constant prices, although investment and consumption decisions are supposed to be expressed in real terms. The gross profits observed in a given short-run period are determined by the decisions capitalists make with respect to their past investment, taking into consideration adjustments for unexpected stock volume changes, and their consumption. This gives an indication that savings are determined by investment and not vice versa.

Assuming that consumption can be expressed as the sum of a portion of capitalists' profits and a constant variable, we can express the consumption function as,

$$C_t = bP_{t-v} + A, \quad 0 < b < 1 \text{ and } A > 0 \quad (11)$$

where v captures the time lag between reaction of consumption expenditure to changes in income and b is the marginal propensity to consume (MPC). Gross profits accruing to capitalists can then be assumed to be the sum of their investment and consumption

expenditure, that is, $P = I + C$ (12)

Substituting equation (12) in (11) we obtain the following identity,

$$P_t = I_t + bP_{t-v} + A \quad (13)$$

which can be simplified to, $P_t = (I_{t-w} + A)/(1-b)$, $0 < b < 1$ and $A > 0$ (14)

This equation now allows us to relate profits to a single determinant and we can observe that profits are an outcome of investment undertaken in an earlier period. This in turn implies that profits are driven by capitalist's savings.

Now we shall try and relate profits to national income. Considering an open economy, allowing for government operations, net exports and savings by workers, output can be expressed as the sum of consumption, gross investment, government expenditure and net exports. Assuming that the major claimants on income produced are capitalists, workers and the government in the form of taxes, gross national product can be assumed to be the sum of gross profits after tax, net wages after tax and taxes collected by the government. Feiwel (1975, p. 119) further expresses gross profit function after tax as the sum of gross investment, budget deficit, export surplus and capitalist's consumption less savings by workers. This implies that the profit relation can be expressed as,

$$P = I' - S + C \quad (15),$$

In the equation above, I' captures the sum of gross investment, budget deficit and the export surplus. This implies that the profits equation (14) can now be expressed as,

$$P_t = (I'_{t-w} - S_{t-w} + A)/(1-b) \quad (16)$$

Now we know that for an open economy, by definition,

$$Y = C + I + G + (X - M) \quad (17)$$

Kalecki uses the profit equation with the difference between aggregate output and profits being the non-profit spendable earnings or the return paid to labour. This allows us to concentrate on the labour (wages and salaries) share in output. With the salary bill denoted by V , we have,

$$V = aY + B \quad (18)$$

This implies the labour share can be expressed as,

$$(V/Y) = a + (B/Y) \quad (19)$$

We can see that the labour share of output increases when output decreases and decreases when output increases. In the simplified case where, national income is composed of the salary bill and profits ($V = Y - P$), we can rewrite equation (19) using this identity,

$$(Y - P)/Y = a + (B/Y) \quad (20)$$

$$\Rightarrow Y = (P + B)/(1 - a)$$

$$\Rightarrow Y_t = (P_t + B)/(1 - a) \quad (21)$$

From equation (21) above, we can see that national income is determined by gross profits.

The relation can be expressed in terms of I' (which factors in gross private investment, the

budget deficit and the export surplus) and savings by substituting the profit equation (16). Thus, we can see that, in the Kaleckian perspective, profits are macroeconomic determinants.

c. Growth-Maximization versus Short-Run Profit-Maximization for the Post-Keynesian Firm

In this section, we consider the objectives of the firm. In neo-classical economics, it is assumed that firms are profit-maximizing. However, in Post-Keynesian economics, allowance is made for the fact that firms may pursue objectives other than profit maximization such as growth, power, longevity and so on.

To analyze the growth-maximizing firm, we shall consider Wood's model for the determination of the mark-up. Wood (1975) postulates a model for the growth maximizing firm. In the model, growth in aggregate demand is taken as endogenous. Wood highlights that there are two constraints faced by the firm, these are an opportunity frontier and a finance frontier. The opportunity frontier represents the firm's trade-off between higher profit margins and higher rate of growth of sales. It recognizes that the opportunities of the firm for growth are related to sets of alternative pricing, investment and sales policies. The finance frontier, on the other hand, represents the ability of the firm to finance investment expenditure, both internally and externally.

Figure 1 below illustrates the firm's constraints, the opportunity frontier and the finance frontier, and how the firm would optimize its growth rate. Given the two constraints that the firm faces, its objective is to maximize the growth of its sales subject to its opportunity

frontier and its finance frontier. The equilibrium point would give the firm's optimal growth rate with the corresponding profit margin, given the firm's current 'best-practice' techniques.

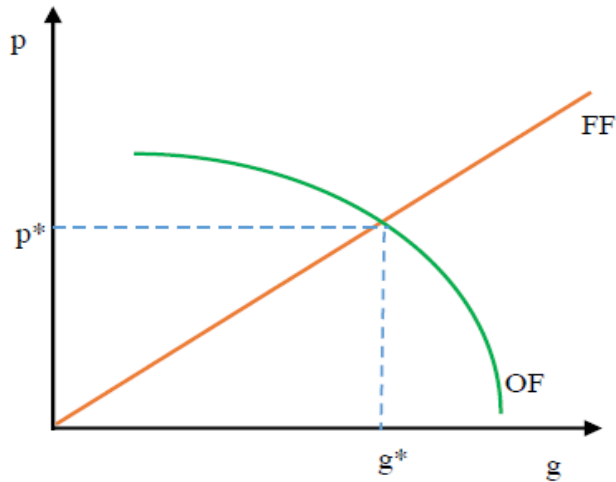


Figure 1: Illustration of the Opportunity Frontier (OF) and the Finance Frontier (FF)

Now supposing that the firm has, at its disposal, a set of best practices (k), and assuming that an increase in the set of best practices can be brought about through investment-intensive and labour-saving techniques, we can postulate that an increase in the set of best practices would shift the opportunity frontier outwards and the finance frontier upwards. The corresponding optimum points create a locus of optimum profit margin and growth rate combinations for the different set of best-practices available to the firm. Figure 2 below illustrates the locus of optimal points that the firm may obtain by mapping out the corresponding growth rates and profit margins given a set of increasing best-practice techniques.

In addition to the constraints highlighted by Wood (1975), Lavoie (1992) introduces

retained earnings to the growth constraints faced by the firm. Given that firms face uncertainty, Lavoie notes that profit maximization has been replaced by profit satisficing. That is to say, firms set minimum levels or thresholds of profits and rates of return that they must meet. It is important to note that profits allow firms to grow. Lavoie (1992, p. 106) notes that, “The growth objectives set by the decision makers are constrained by the financial requirements of profitability, past and present.” Thus, we can see that profits play an important role, past and present profits.

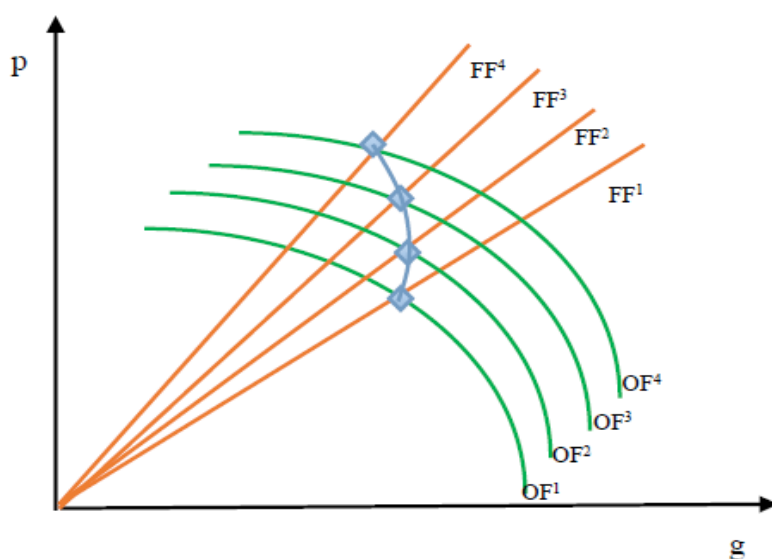


Figure 2: Illustration of the locus of optimal growth points for varying best-practice techniques

The earnings retained by the firms from past profits achieved are important in the firm's investment decision and hence have a bearing on the growth of the firm. As Lavoie (1992; p. 106) states, “based on the concrete reality rather than an abstract idealized one, asserts that bankers only loan money to those who already have it.” and “to be financed externally, firms must prove their capacity to generate profits” (ibid). However, we must also note that

retained earnings are complementary to external finance (either in the form of loans obtained from banks and financial institutions or equity issued by the firm) obtained by the firm and not a substitute. The profit-satisficing view discussed by Lavoie also reflects a need for the firm's governing structure to provide a constant stream of dividends so as to subdue the shareholders.

Harcourt (2006) postulates that the firm has a double objective in setting its price and hence mark-up. These objectives are first, to be consistent with its expectations of the demand of its products; and secondly, to provide enough retained profits to finance its investments. Harcourt and Kenyon provide their own take on Wood's model for growth. In their model, there are three aspects of the dimensions to the investment decision of the firm; (i) Amount of extra capacity to be installed in each period; (ii) The sort of investment to be done, that is, the choice of technique by the firm; and (iii) The cost and method of finance to be obtained by the firm. Their model is based on historical data and focuses on the uncertainty faced by firms and the importance of retained earnings thereof. Harcourt and Kenyon, much like Wood, conclude that growth of the firm is the main objective in order for the firm to survive.

Lavoie (1992) alludes to the fact that over time, long-run profit maximization is equivalent to growth maximization by the firm, however, there is a difference between short-run profit maximization and growth maximization with the difference being exhibited in the firm's dividend and investment policies, and its price-setting behaviour. As can be observed from Woods' model of the growth of the firm, firms that target short-run profit optimization would have a higher preference for a greater short-run profit margin, which would result in

a reduction in the firm's growth rate (which in Wood's model was measured as a growth of sales).

d. Power as an Objective for the Growth of the Firm

In this section we shall briefly explore power as an objective of the firm and its implications thereof on the firm's behaviour. In the previous section we looked at the firm's decision around maximizing growth versus maximizing its short-run profits. We shall now consider the motives behind the firm's preference for growth as an objective.

Dunn and Pressman (2005) explores the economic ideas and perspectives of John Kenneth Galbraith. Galbraith made major contributions towards the narrative of power being the objective of the firm. The key themes that arise in Galbraith's writings as stated by Dunn et al. (2005) are:

- i. His analysis of the economic power held by large firms; and
- ii. His argument that such power is one of the main reasons for the technological success of the US economy in the post-World-War II era.

Galbraith highlighted that "understanding the nature of modern production is central for understanding the nature of the firm which seeks to control and supersede the market in order to expand its influence." (Dunn et al., 2005, p. 162) Large corporations seek power and control over the markets in which they operate. As Lavoie (1992, p. 99) postulates, "small firms operate in competitive markets and aim to maximize their short-run profits" and "large firms operate in imperfect markets and pursue other goals other than profit maximization". Lavoie reinforces Galbraith's view on the firm's pursuit of power in that

he argues that “the firm wants power over its supplies of materials, over its customers, over the government, over the kind of technology to be utilized.” (ibid)

The arguments by Galbraith and Lavoie on power being the objective of the firm are also centred around the uncertainty faced by firms. Lavoie points out that in a world where uncertainty prevails, firms need to find means to guarantee access to financial capital, all of their material inputs or critical information. Galbraith (1975) postulates that power sought by firms is not only limited to the market sphere, but extends to other spheres, political and social. It would appear that power gained by the firm guarantees stability and its survival. “A successful quest for power endows the firm with stability and permanence.” (Lavoie, 1992, p. 101)

Thus, we can see that growth ensures economic power for those who already have it, no less than those who strive for it. Galbraith (1975) and Eichner (1987) point out that growth simultaneously provides for the survival of the firm, the satisfaction of the managers and the hopes of the employees within the technostructure and hence, the objective of growth, rather than the consumption of profits is predominant. Furthermore, in the firm’s pursuit for power and survival, the growth of the firm’s market share is an implied goal. Galbraith’s (1975) analysis of the modern corporation is an analysis of the dynamics of firm growth, focusing on the importance of mergers and acquisitions. Shareholders may intervene in the operations of the firm but only when earnings or rates of return are less than what was otherwise expected. This further reinforces Lavoie’s argument that payment of dividends subdues shareholders. Galbraith (1975) argues that low earnings make a firm vulnerable, other circumstances being favourable, to a take-over bid from another firm. This is a result

of a cheaper stock price brought about by the reduced earnings of the firm, which in turn makes shareholders more open to offers by other corporations at some price above the going market rate. The pursuit of power by firms can see an increase in mergers and acquisitions by firms.

However, the firm's pursuit of power has macroeconomic implications. Galbraith (1975) presented an analysis of capitalism where organization in addition to income, underpins power, and where the decisions of individual workers, consumers and households have a subordinate role in determining macroeconomic outcomes. As the number of oligopolies rises, the resultant increased excess capacity and reduced production observed in individual industries amplify the propensity for the economy to stagnate.

3. THE MICRO-MACRO LINK OF FINANCIALIZATION IN KALECKIAN ECONOMICS

In this section we explore the macroeconomic and microeconomic Kaleckian perspectives surrounding financialization and we try and draw the link between the microeconomic theory (at firm level) to the macroeconomic theory (aggregated global perspective). It is important for our analysis to firstly isolate the micro and macro and then draw the link between the two. To accomplish this, we shall consider the “financialized firm” and then look at the investment decision of firms in the context of financialization. Lastly, the link is drawn by investigating the firm's pricing decision in the context of financialization.

a. The Financialized Firm

In order to understand financialization from a microeconomic perspective, it is important

to investigate what the “financialized firm” entails and what its characteristics are. Palley (2007) raises the point that financialization has implications on the economy at both a micro and macro level. In his research, Palley uses data obtained from the United States of America on debt/credit levels held by households to form the core of his analysis. Palley (2007, p. 6) singles out the rise in debt levels as the key defining feature of financialization. This indicates that there has been a rise in the participation of firms (independently) in financial market activity, possibly with the aim of deriving profits (that is to say, firms use financial markets to increase their revenue). The participation of firms in financial market activity independently alludes to the fact that some firms either own financial institutions or some firms have employed the services of financial institutions to participate in financial market activity. This gives us one key characteristic of the “financialized firm”, which is the increased participation (independently) in financial market activity.

Milberg and Shapiro (2013) investigate the implications of the 2008 financial crisis for firm innovation. This study alludes to the effects that financialization has had on the real economy. By considering how firms finance innovation (and hence growth), we are exposed to the role that finance plays in the modern firm and historically. In the paper, Milberg and Shapiro consider two dimensions to financialization, the first being “the growth in importance of the financial sector, measured in terms of the share of rentier income in national income or in terms of financial sector profits as a share of total corporate profits” (Milberg and Shapiro, 2013, p. 224) and the second being “the financialization of non-financial corporations, as traditionally non-financial firms became more like financial holding companies, with a spectrum of financial services and financial investments swamping production in terms of their contribution to company revenue.” (ibid).

Of interest in this paper is the second dimension to financialization that is highlighted by Milberg and Shapiro, that is the financialization of non-financial firms. In their research, Milberg and Shapiro (2013, p. 224-225) find that there was a rise in the share of financial assets in total asset holdings of non-financial firms, an indication that non-financial firms increased their financial asset holdings since the 1980s. The findings made by Milberg and Shapiro (2013) indicate another characteristic of the “financialized firm” which is also an indication of the trend observed in modern firms, and that is the traditionally non-financial firms becoming more like financial holding firms. With the financialization of firms one can expect a change in the firm’s behaviour in terms of their investment decision and their pricing decisions. In the next section we shall consider the firm’s investment decision in the context of financialization.

b. The Firm’s Investment in The Context of Financialization

In order to better understand the impact of financialization on the economy, it is important to look at how it has affected the investment decisions of the firm and also firms’ strategy. In “*The Principle of Increasing Risk*” (Kalecki, 1937), we learn that for the Post-Keynesian firm, the internal funding of the firm (or rather the firm’s ability to accumulate internal reserves) drives the investment decision of the firm.

In the traditional Kaleckian view, the firm’s investment decision is limited by the availability of internal finance that is generated from the past profits of the investing firm. In this context, firms would have a higher preference for a high rate of profit as this would lead to higher retained earnings for investment.

Considering how the role of finance has grown in recent years, one should consider the possibility of financialization being an accumulation regime by firms. In this section, we shall also consider the emergence of finance as a “new” form of capital and also discuss how financialization has impacted on the firm’s investment decisions. Observations have been made that “not only has there been an increase in the GDP share of the financial industry but there has also been an increase in profits from interest, dividends and capital gains much greater than profits from productive investment for non-financial corporations.” (Van der Zwan, 2014, p. 103).

At a glance, it would appear that financialization has provided multiple avenues for firms to increase their profits and hence their internal funds, either through the issuing of shares or through open market operations by firms. Lapavitsas (2013, p. 794) lists three characteristic tendencies of accumulation in developed countries that have led to financialization resulting in structural changes in capitalism. These are: “non-financial enterprises becoming increasingly involved in financial processes independently, banks transacting in open financial markets with the aim of making profits through financial trading rather than through lending and borrowing and lastly, individuals and households becoming increasingly reliant on financial systems to facilitate access to vital goods and services.” (ibid). Some authors have stated that these changes in the capitalist structure have seen the rise of financialization as a new form of capitalism or as a new regime for accumulation (Van der Zwan, 2014; Foster, 2007).

Considering that corporations have gained the ability to earn higher profits through the rise of financialization, one would expect that this would lead to increased accumulation.

However, this is not the case. In fact, there has been a negative relationship observed between financialization and accumulation (Palley, 2007; Epstein, 2005; Dore, 2008; Lapavistas, 2013). In addition to financialization increasing profits for firms, it appears that firm profits generated by firms from financial market participation have helped them maintain their profit margins in light of increasing macroeconomic uncertainty and risk (Demir, 2009). This implies that risk aversion (or increased uncertainty) by firms may have led to their increased preference for investment in financial assets as opposed to investment in production.

In turn, this requires an explanation of the link between firms' individual behaviour and the consequences at a more 'macro' level in the context of financialization. Skott and Ryoo (2008a, 2008b) set out to investigate the macroeconomic implications of financialization. They explore the macroeconomic implications of changes in firms' financial decisions (retention rate, new equity issues, debt finance), changes in the investment function, household financial behaviour (i.e. saving and portfolio decisions), and the level of interest rates. These changes are among the ones that have been highlighted by the financialization literature but clearly make up only a small subset of the issues that have been raised.

Hein and van Treeck (2007) assess the macroeconomic implications of financialization by applying two different variants of a Kaleckian model of distribution and growth. They focus on the effects of changes in distribution between shareholders/rentiers, firms and workers, as well as on the effects of increasing "shareholder value orientation" of management's investment decisions. The authors associate financialization with rising power of shareholders which they believe has led to increased shareholder value orientation of the

firms' management and they find that this has a negative effect on the firms' investment behaviour. The paper shows that increased “shareholder value orientation” of management's investment decisions is related to a different function of pricing: with growth as an objective.

From the literature, it would appear that there is a relationship between firms' preference for higher profits and the rise in financialization, with financialization appearing to be an accumulation strategy by firms. From figure 3 presented below, we can see how investment by firms in South Africa has decreased as a proportion of corporate profits. This is consistent with the theory presented by Palley (2007), Dore (2008) and Skott and Ryoo (2008a).

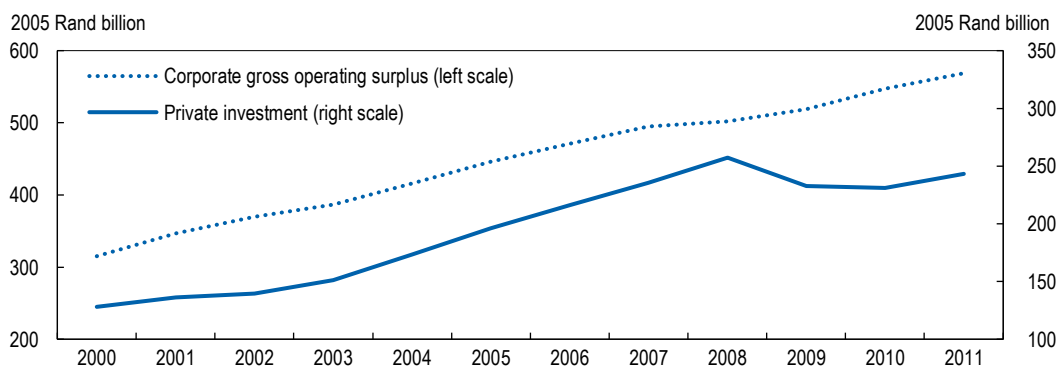


Figure 3: Private investment decoupling from corporate profits in South Africa 2000 – 2011 (Data Source: StatsSA and OECD estimates). Adapted from OECD (2013, p. 16).

c. The Pricing Decision in The Context of Financialization

One can note that the link between the microeconomic and macroeconomic rise of financialization is the firms' pricing decision under financialization. Thus, we shall consider the firms' pricing decision under financialization.

In a Kaleckian context, firm pricing behaviour is very important. The firm's pricing decisions give an indication of two very important aspects relating to the firm; the first is the degree of monopoly i.e. an indication of how oligopolistic the market is and the second is the motives of the firm's management i.e. the firm management's preferences for long-term growth versus short-term profits for the firm.

In trying to understand the firm's pricing behaviour, we must first consider that prices are influenced either by demand-side factors or supply-side factors. In our discussion, we will focus on cost-oriented pricing as this pricing is associated with the operations of the firm. Lavoie (1992, p. 129-143) discusses 'cost-plus' pricing i.e. pricing that is cost-oriented. There are three variants of cost-plus pricing which are "mark-up pricing, full-cost pricing and target-return pricing." (Lavoie, 1992, p. 129). From Lavoie's (1992) discussion, it can be seen that the mark-up is a strategic variable in firms' investment decisions.

In his paper, Lavoie makes a point that these prices that are observed in the short-run are not market-clearing prices and they "are not meant to equate supply to demand...nor are they intended to equate demand to supply at the standard rate of capacity utilization." (Lavoie, 1992, p. 133). We can consider this mark-up pricing to be target-return pricing, in which the profit margin set by the firm determines a particular rate of return on investment. Thus, "as the firm attempts to maximize its rate of growth...there is a certain rate of profit that can and that has to be realised for all the constraints to be met." (Lavoie, 1992, p. 139). It would appear from his discussion that this type of pricing is prevalent among firms because it constitutes a convenient rule of thumb in making complex and difficult decisions in a world of uncertainty. This type of pricing leads to capacity under-utilization by the

firms.

It can further be argued that the rise in shareholder value orientation has also led to increased acquisitions and mergers by firms (a rise in private equity operations). Here we can see that finance obtained by the firm can be used to buy shares in other firms and may also be used to finance takeovers. These operations by the firm are known to have effects on share prices of the firm, with positive acquisitions resulting in increased share prices.

Lavoie (2007) argues that firm management's preference for growth (i.e. retain profits and invest) has gradually been replaced by a preference for income (i.e. downsize and distribute). This means that firms are shifting their preferences away from the classical determinants of growth and shifting more towards increased holdings of virtual wealth.

Sawyer (2013) highlights that with a rise in the size of the financial sector, there have been some notable effects that have been observed, one of which is the downsizing of production (that is to say, firms set their prices in a manner in which they derive a particular profit and by so doing, their production decreases) and income redistribution by firms. The approaches of Lavoie (2007) and Sawyer (2013) could suggest then that there are features of financialization that can be explained by and relate to a degree of monopoly approach to pricing.

Eckhard (2012) notes that one of the channels through which financialization has filtered into the economy is through the rise in shareholder power. He notes that this rise in power has led to a decline in the firm management's and workers' preference for long-run growth of the firm and an increase in shareholders' preference for short-run profitability. The

increases in the firm's stock price and higher dividend payments have led to a rise in shareholder's preference for short-run profits. Furthermore, Eckhard (2012) the increased dividend payments and increased share buy-backs by firms restrict the firm's availability of finance for firm's real investment.

Given the channels through which financialization has filtered into the economy, we can expect that the firm's pricing should be geared towards short-term profitability. This is due to the firm managements' objectives being geared towards a higher share price of the firm and higher dividend payments to shareholders. We can see that financialization has led to firms downsizing their production and redistributing their income. For firms to have such an influence on their capacity utilization, it implies that markets are imperfect. In Kaleckian theory firms set a mark-up that is dependent on the degree of monopoly. The mark-up plays an important strategic role as firms can use the retained earnings generated by this mark-up to finance their investment decisions.

4. FINANCIALIZATION AND THE POST-KEYNESIAN FIRM

With the modern-day firm, there is a clear distinction between the firm's management and the firm's owners (the shareholders) and it is important to understand that their objectives may be different from one another. As discussed in the previous sections, the firm managements' preferences for long-term growth and profitability differ from the shareholders' preference for short-run profitability. Thus, we can expect that with the rise of financialization, the firm's accumulation strategy may also be affected.

Stockhammer (2004) introduces the concept of financialization to the Post-Keynesian

framework. He notes that in the decades preceding the paper, there had been a steady decline in the accumulation of physical capital accompanied by an increase in investments in financial assets.

Stockhammer (2004) attempts to relate financialization to growth theories and argues that the process of financialization is linked to changes in the internal power structure of the firm. In the theory of the Post-Keynesian firm we find that there is the separation between ownership and control. Here, there is a clear distinction between the objectives of the managers (which are geared toward growth of the firm) and those of the shareholders (which are identified as short-term profit maximization). Several authors have noted that there appears to be a trade-off for firms between growth and profitability with preference for higher profitability having adverse effects on investment or accumulation by firms (Hein, 2006/2007; Freeman, 2010; Fujita and Sasaki, 2010; Gleadle and Haslam, 2010).

From the previous sections, we have seen that financialization has had a significant effect on the operations of firms. Stockhammer (2004: p. 727) states that, “In their present institutional incarnation as pension or investment funds, rentiers may well care more about capital gains, i.e., asset prices, than about profits.” Although they (asset prices) are not particularly targets for the firm, they are important for firms which engage in activities such as share trading. However, asset prices are hard to predict and have proven to be quite volatile over the years. Asset prices are, however, linked to profits (or profitability of the firm). This relates to Milberg and Shapiro’s (2013) research into how firm innovation is financed. They note that innovation has increased more in the financial sector and firms have a preference for equity-based finance for investment as opposed to debt finance. This

is in line with Kalecki's (1937) observation that firms have a higher preference for financing investment internally (through profits and retained earnings) as opposed to debt (loans from financial institutions). In the context of financialization, this is evident in the increased equity dealings by firms (i.e. increased share issues and buy-backs by firms as well as increased mergers and acquisitions) which have been used to increase the firms' profitability and also finance firms' investments. In his discussion, Stockhammer (2004) concludes that there is a link between financialization and the slowdown in capital accumulation that has been observed over the years.

Dallery (2009) presents a case for the firm's investment decision under the influence of financialization. In this paper, Dallery considers two approaches: the first approach is modelling financialization as a constraint for the managerial firm, and the second approach looks at a finance-dominated firm, integrating shareholder interests as the objective of the firm. This approach was an extension of Stockhammer's (2004) approach to financialization. Dallery concludes that the behaviour of the Post-Keynesian firm under financialization results in a reduced rate of accumulation, increases in financial fragility, and may possibly lead to macroeconomic instability.

Furthermore, as discussed in section 2 sub-section d, an alternative motive for firms may be power. As discussed in the section, power allows firms to grow, and to survive. In the context of financialization, this concept may be exhibited in the increased rate of mergers and acquisitions observed. It can be hypothesized that firms acquire other firms to either increase their market share or lower their production cost. This, however, is a theory that may merit some investigation. However, as Milberg and Shapiro (2013) observe, there have

been increased share buy-backs and mergers and acquisitions by firms, with the larger non-financial firms becoming more like financial holding firms.

5. SHAREHOLDER VALUE ORIENTATION AND THE FIRM'S INVESTMENT DECISION

As has been discussed in the previous sections, financialization has led to an increase in shareholder power, with the firm's objectives being aligned with the shareholders' objectives. In this section we shall look at how shareholder value orientation has affected the firm's investment decision and hence accumulation by firms.

Stockhammer (2005) sets out to investigate the effects of shareholder value orientation on the firm's investment decisions. Shareholder value orientation can be described as the changes in corporate behaviour in the name of creating increased (financial/monetary) value for the shareholder. Stockhammer (ibid) notes that the rise in shareholder value orientation is one of the features of the neoliberal era. Stockhammer (2005) notes that in the immediate post-war era, referred to as Fordism, the role of shareholders in a firm was restricted or subdued. This was as a result of several factors which include: heavy regulation of financial transactions; controlled capital flows; and interest rate ceilings were imposed. Under these conditions, shareholders' influence was pacified as their ability to influence the firm's management behaviour was limited.

Stockhammer (2005) attributes this rise in shareholder value to the increased financial liberalization experienced in the 1970s. With the deregulation of financial markets, new financial instruments could be utilized and this in turn ushered in hostile takeovers through

the use of financial securities. This meant that shareholders could replace management if they had been dissatisfied with the financial performance of the firm.

Several authors have investigated the effects of financialization and rising shareholder value on investment (e.g. Hein (2009, 2010, 2011); Sasaki and Fujita, 2012; Tori and Onaran, 2015). Watson (2009) argues that the accumulation process passes through firm management's success in deriving additional shareholder value, with management driving up share prices.

Van der Zwan (2014, p. 107) notes that there are social classes within modern corporations: managers, shareholders and employees. With the rise in shareholder value orientation, the objectives of the shareholders have been prioritized over the other constituents of the firm. Van der Zwan (2014) finds that corporate efficiency has been characterized by firms maximizing dividends to shareholders and maintaining higher stock prices.

It can be argued that the rise in shareholder value orientation by firms has resulted in income distributional effects which have seen a rise in preference for higher profitability by firms at the expense of worker wages (Hein 2009, Hein and Van Treeck, 2007 & 2008), with the firms' profits being channelled towards dividend payments and retained earnings. Hein (2009) notes that there has been a steady decline in the labour share of income in the USA which has been accompanied by a rise in the gross profit share of income. Furthermore, this rise in the gross profit share translates to a rise in retained profits and an increase in the income share of shareholders (that is, increased dividend payments) (ibid).

With firms' objectives favouring increased returns to investors and shareholders, we should

consider the effects that this has had in the pricing behaviour of firms. Kohler et al. (2015) argues that the rise in shareholder value orientation has led to an increase in interest rates and dividend payments and this, in turn, has led to an increase in firm overhead costs. The rise in overhead costs of the firm could result in an increase in the firms' mark-up dependent on the degree of monopoly.

6. **SOME EMPIRICAL FINDINGS OF FINANCIALIZATION**

In this section we seek to explore the empirical studies conducted on financialization. We explore the work conducted by several authors, exploring various aspects of financialization, in varying contexts, and varying geographical locations. We first make considerations of the

a. Some Considerations of the Analytical Limitations of Financialization

In exploring the empirical work around financialization, it is important to first highlight the limitations of conducting empirical studies and the limitations of existing empirical literature. French et al. (2008) states that financialization is more of a qualitative shift as opposed to a quantitative shift, which would explain the apparent "dearth of empirical evidence that has been offered to support the claims that the US and UK have become, or are becoming financialized."

Karwowski, et al. (2017) highlight how the majority of empirical research focuses on the US economy and on specific sectors across a small number of countries. Karwowski et al. (2017, p. 2) note that "This has created an analytical gap in the area of cross-country comparison over time for larger samples of countries." The authors argue that the focus on

the US and UK economies creates a bias in the literature and has created an understanding of financialization that utilizes the US economy as a reference point.

Furthermore, as highlighted by Christophers (2015), the apparent fragmentation (or rather, apparent lack of coherence) in financialization literature also poses challenges from an analytical point of view. In investigating financialization, it is important to clearly identify and outline the quantifiable hypotheses around financialization. Notwithstanding the analytical limitations posed by the lack of coherence in the literature, there are some advantages that it poses, such as the space or allowance for the investigation of multiple avenues through which financialization may arise or be propagated in the economy.

b. Some Empirical Evidence of Financialization

In this section, we shall highlight a few seminal works that have been conducted on financialization. As previously stated, the majority of the studies conducted around financialization are based on the US and UK economy. One of the studies is presented by Krippner (2005), who provides systematic empirical evidence of financialization in the US economy. The paper explores financialization post 1970s period. Krippner (ibid, p. 174) notes that the “the data that would allow a macro-level examination of the growing weight of finance in the American economy—a development that I refer to as financialization—raise a host of difficult methodological issues. As a result, even those accounts that are concerned with understanding the rise of finance in structural terms typically assert the presence of this phenomenon without providing any direct evidence for it.” Prior to Krippner’s paper, contributions were made by Arrighi (1994) and Phillips (2002), however, these contributions could not provide evidence of financialization. Krippner (ibid) defines

financialization as an accumulation strategy for firms and provides two discrete measures of financialization by first, examining the sources of revenue for non-financial firms and second, examining the growing importance of the financial sector as a source of profits.

To examine the sources of revenue of non-financial firms, Krippner utilizes data on portfolio income of the non-financial firms. Krippner (*ibid*, p. 184) finds, as presented in figure 4, that, “an increasing trend indicates a higher share of revenues coming from financial relative to non-financial sources of income and hence is consistent with a greater degree of financialization.” The findings made by the author are consistent with the theoretical expectations and seem to provide some evidence of financialization in the US economy.

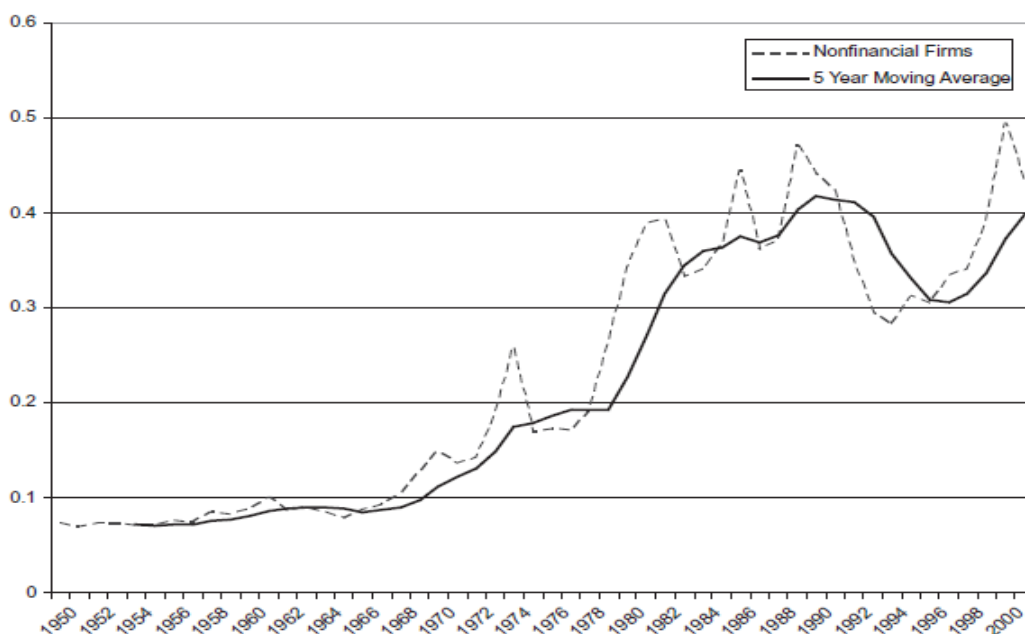


Figure 4: Ratio of portfolio income to cash flow for US non-financial corporations, 1950 – 2000.

Adapted from Krippner, (2005, p. 185)

To ascertain the second measure of financialization, which is the overall growth of the financial sector as a source of profits, Krippner (ibid) utilizes corporate profits and corporate cashflows and presents the ratio of financial to non-financial profits and cashflows. The author utilizes data from 1950 to 2000. The author posits that “since the flaws of these two measures are symmetrical and offsetting, we can be confident that the true, unobserved ratio of financial to non-financial profits lies somewhere in between the two measures.” (ibid, p. 188). The results are presented in figure 5 below, which illustrates the ratio of financial to non-financial profits and cashflows for US corporations. We can see that the data presented in figure 5 observes an upward trend, indicating increasing profits and cash flow derived from the financial sector over the observed period. This indicates the growing importance of the financial sector as a source of profits.

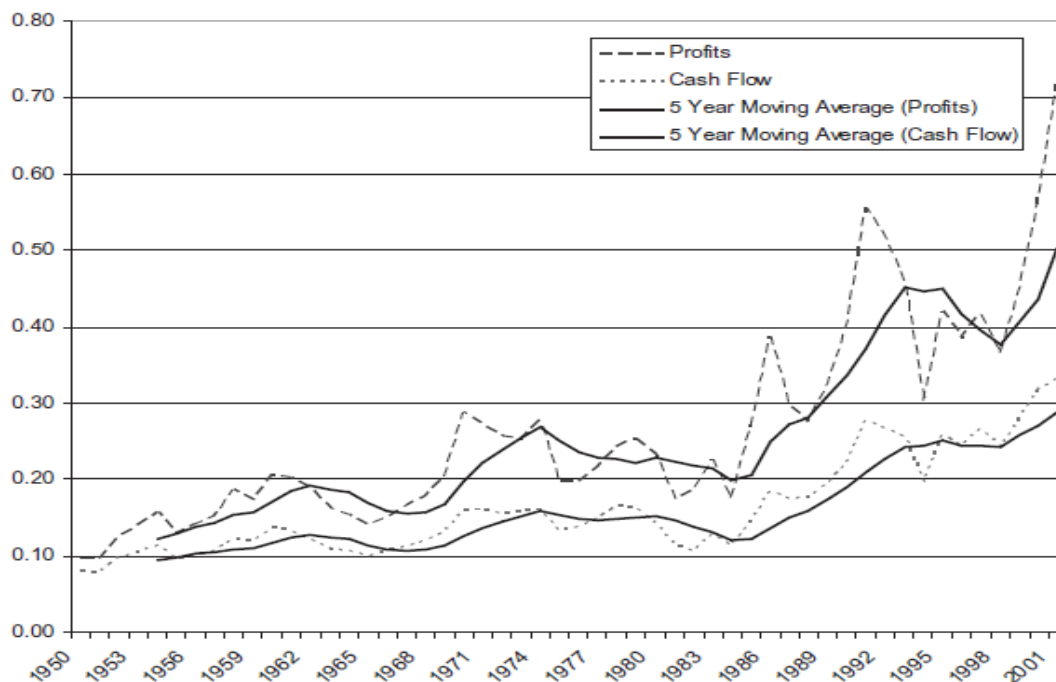


Figure 5: Ratio of financial to non-financial profits and cash flow in the US economy, 1950 – 2000.

Adapted from Krippner (2005, p. 189)

Assa (2012) sets out to conduct a regression analysis to capture the extent of financialization and its effects on the OECD countries. The author uses two identifiable measures of financialization which are: the share of finance in Gross Domestic Product or Gross Value Added; and (2) employment in the financial sector as a percentage of total employment. However, it is worth noting that the second measure of financialization presented by the author faces the challenge of the financial sector reporting low employment figures which is consistent with current market expectations as the financial sector is not labour intensive in nature.

To investigate the extent of financialization in OECD countries, Assa utilizes three regression models, providing four variations of each model. The variables presented in tables 1 to 3 below are defined as follows: *GINI* represents the GINI coefficient GINI coefficient for income inequality before taxes (data points for mid-70s, mid-80s, around 1990, mid-90s, around 2000 and mid-2000s, OECD data); *GDP growth* represents the real annual growth rates of gross domestic product (1970-2008, OECD data); *Unem* represents the annual rate of unemployment (1970-2008, ILO data); *FIRE_VA* represents value added in finance as a % of total value added (1970-2008, OECD data); *Per Capita* represents a control for per capita income; and *Empl_FIRE* represents employment in finance as a % of total employment (1970-2008, ILO data). The results of the regression model are presented in tables 1 – 3 below.

<i>Fixed-effects. Dependent variable: GiniAnte. Robust (HAC) standard errors</i>				
Sample Size	N = 17	N = 17	N = 16	N = 16
	(1)	(2)	(3)	(4)
Constant	0.31*** (12.15)	0.31*** (12.14)	0.36*** (21.2)	0.37*** (12.44)
FIRE_VA	0.57*** (5.06)	0.49** (2.32)		
Empl_FIRE			0.73*** (4.41)	0.81** (2.33)
Per_Capita		0.00 (0.46)		0.00 (-0.27)
Adj. R ²	0.75	0.75	0.80	0.80

Table 1: Financialization and inequality before taxes and transfers. Adapted from Assa (2012, p. 38)

With regards to the relationship between financialization and inequality, the author concludes that there appears to be correlation between high inequality and financialization. From the regression presented in Table 1 above, we can see that a percentage increase in the share of finance in total value added is associated with up to 0.57% more inequality, while a percentage increase in the share of finance in total employment is associated with up to 0.81% more inequality.

<i>Fixed-effects. Dependent variable: GDP_growth. Robust (HAC) standard errors</i>				
Sample Size	N = 33	N = 33	N = 32	N = 32
	(1)	(2)	(3)	(4)
Constant	0.04*** (6.88)	0.05*** (7.02)	0.04*** (8.72)	0.03*** (4.18)
FIRE_VA	-0.06* (-1.78)	-0.12** (-2.25)		
Empl_FIRE			-0.05 (-1.14)	-0.20*** (-3.13)
Per_Capita		0.00 (1.34)		0.00** (2.15)
Adj. R ²	0.17	0.18	0.21	0.21

Table 2: Financialization and GDP growth rate. Reproduced from Assa (2012, p. 38).

<i>Fixed-effects. Dependent variable: Unempl. Robust (HAC) standard errors</i>				
Sample Size	N = 33	N = 33	N = 32	N = 32
	(1)	(2)	(3)	(4)
Constant	0.04*** (3.03)	0.03*** (2.78)	0.05***	0.09*** (5.72)
FIRE_VA	0.12* (1.89)	0.34** (2.50)		
Empl_FIRE			0.12* (1.87)	0.74*** (2.63)
Per_Capita		0.00 (-1.55)		0.00** (-2.22)
Adj. R ²	0.55	0.57	0.53	0.60

Table 3: Financialization and Annual rate of unemployment. Adapted from Assa (2012, p. 38).

Lastly, in relation to the relationship between unemployment and financialization, there appears to be a positive relationship. We can see from Table 3 that a percentage increase in the share of finance in total value added is associated with up to 0.34% more unemployment, while a percentage increase in the share of finance in total employment is associated with up to 0.74% more unemployment. Thus, we can see that there is a high degree of financialization that has taken place in OECD countries. The results obtained by Assa seem to validate the previous studies conducted by several authors on the effect of financialization in investment and accumulation, as we can observe that financialization has a negative effect on GDP growth and employment in the economy. Furthermore, the results from the GINI coefficient regression model and the unemployment regression model seem to validate the theory that financialization has been characterized by a downsize and redistribute regime by firms.

Another contribution is provided by Karwowski et al. (2017), which provides a cross-country comparison and analysis of financialization. As previously stated, there is little

research that has been conducted on cross-country analysis of financialization around the world. Karwowski et al. (2017) set out to achieve this by considering several hypotheses. The hypotheses considered and their corresponding indicators are highlighted in Table 4 below.

Hypothesis	Indicator
H2: Growth in investment rates	Gross capital formation (annual % change)
H3: Financial deregulation	Financial reform index ¹⁰ (range: 0-1)
H4: Market-based vs. bank-based financial systems	Ratio: stock market value traded (% GDP)/bank credit (% GDP)
H5: Debt-driven vs. export-driven demand regimes	Household debt and inversed raking of net export position (both % GDP)
H6: Foreign financial inflows	Inflow of portfolio and other investment (excluding FDI), % of GDP
H7: Asset price bubbles	Real house price index (base year 1997=100)

Table 4: Indicators for testing hypothesis H2-H6. Reproduced from Karwowski et al. (2012, p. 13).

The cross-country analysis of financialization is conducted across three private economic sectors, i.e. households, NFCs and the financial sector, for 17 OECD countries spanning the decade before the global financial crisis (1997-2007). Table 5 below presents the rankings of five sectoral financialization measures by colour coding. The 17 sample countries are arranged in quartiles with respect to their relative position in the country ranking for each financialization indicator. The quartiles are referred to as ‘high’ (top quartile), ‘medium high’ (second quartile), ‘medium low’ (third quartile) and ‘low’ (bottom quartile), respectively. The quartile labels in the table have been colour-coded, with darker shadings indicating higher levels of financialization.

Karwowski et al. (2017, p. 15) find that the three Anglo-Saxon countries Australia, UK and US show signs of financialization across all three sectors; Austria, Italy and Spain rank low or medium-low on our five financialization measures; and there is no supporting evidence that financialization has happened simultaneously across all economic sectors. Karwowski et al. (2017) are then able to reject H1, concluding that financialization is not a uniform process, but diverges across sectors in different countries.

	Households	Non-financial firms		Financial Sector	
	Debt	Financial income	Debt	Value added	Debt
Australia	high			high	
Austria	low	mlow	low	mlow	mlow
Belgium	low	high	mlow	mhigh	mhigh
Denmark	high	high	mhigh	mlow	mhigh
Finland	mlow	mhigh	mhigh	low	low
France	mlow	high	mlow	low	mhigh
Germany	mlow	mlow	low	mlow	mhigh
Greece	low	low	mhigh	low	low
Ireland	high	low	mlow	high	high
Italy	low	mlow	low	mlow	low
Japan	mhigh	low		mhigh	
Netherlands	high	mhigh	high	mhigh	high
Portugal	mlow	mlow	mhigh	mhigh	mlow
Spain	mlow	low	mlow	mlow	mlow
Sweden	mhigh	high	high	low	mlow
UK	mhigh	mhigh	high	high	high
US	mhigh	mhigh		high	

Table 5: Sample countries arranged by ranking quartiles for 5 sectoral financialization indicators (1997-2007). Adapted from Karwowski et al. (2012, p. 16).

Table 6 below reports the correlation between the measures for financialization hypotheses H2 to H7 and the financialization by sector. Karwowski et al. (2017) refer to the evidence for a hypothesis as supportive if two or more statistically significant correlations are found

and as of limited support if we find one statistically significant correlation. With regards to hypothesis H2, the Marxist investment slowdown hypothesis, there is no statistically significant correlation. This means that no effect of a secular investment slowdown by financialization was detected. However, from the table presented, we can see that H3, is positively and statistically significantly correlated with household debt and both measures of financial sector financialization. The financialization measures for NFC do not show significant correlations with the financial deregulation measures. Thus, Karwowski et al. (2017) conclude that there is support for hypothesis H3.

	Household debt	NFC gross financial income	NFC debt	Financial sector value added	Financial sector debt
Investment slowdown	-0.358	0.282	0.081	-0.762	-0.521
Financial deregulation	0.423**	0.266	0.042	0.43**	0.669***
Market-based/ bank-based systems	-0.032	0.473**	0.356*	-0.476	-0.385
Debt-driven/ export-driven demand regimes	0.598***	-0.097	0.379*	0.531**	0.194
Foreign financial inflows	0.174	0.227	0.2	0.27	0.833***
House price inflation	0.371*	0.176	0.455*	0.27	0.436*

Table 6: Spearman rank-order correlation coefficients for financialization hypotheses and economic sectors (1997-2007). Reproduced from Karwowski et al. (2012, p. 16).

Karwowski et al. (2017) find limited support that the market-based/bank-based indicator captures financialization trends in the three sectors (H4). Only the correlation with NFC gross financial income (0.473) and NFC debt (0.356) are statistically significant. This would mean that, the shift from bank-based to market-based financial systems only seems

to impact on NFCs, but not other sectors of the economy.

Karwowski et al. (2017) find support for H5 that demand regimes and the degree of financialization are correlated. This means the demand regime exercises a general effect on the economy where countries characterised by debt-driven demand are likely to be financialised. However, the link between financial inflows and the vulnerability measure for the financial sector (i.e. financial sector debt) is strong, which means there is limited support for H6. Finally, concerning H7, house price inflation is positively associated with vulnerability measures across all three sectors. This means house price inflation is correlated with household debt, NFC debt and financial sector debt. This shows that there is strong empirical support for H7.

The findings presented by the authors suggest that, some theories of financialization are more useful than others and there are theories where full supporting evidence for all the hypothesized theories. However, to quote Carl Sagan “*the absence of evidence is not the evidence of absence*” and the lack of evidence presented in Karwowski et al. (2017) is an indication of the need for further research and the inclusion of more choice variables. However, one would need to be careful not to over-specify the regression model.

7. A BRIEF DISCUSSION ON FINANCIALIZATION IN THE SOUTH AFRICAN CONTEXT

This section aims to provide a brief discussion on the evidence of financialization in the South African economy. The case for the South African economy provides an interesting discussion given the country’s political and socio-economic history. Examining

financialization and its effects thereof on the South African economy provides a slightly different pattern to the one previously described in the preceding sections.

Ashman et al. (2011) investigate the evidence of financialization in the South African context. The paper finds that in South Africa, the financialization of traditionally non-financial sectors or industries is also evident as “non-financial companies have diversified and gained an increasing share of profits from their financial activities, a development accompanied by the increasing financing of investment from retained earnings or borrowing on open markets.” (ibid, p. 175). This is consistent with the theory outlined in the preceding sections.

Ashman et al. (2011) makes the argument that financialization in South Africa was driven more so by political factors rather than the factors listed in the preceding sections. The authors make the argument that with the change in the political climate in South Africa in the years leading up to the end of the apartheid era, the white capitalists, whose motives were to preserve and secure their wealth, sought the security of property rights and market relations in the new rule of government and also the right to internationalize and financialize their operations.

Fine (2012) uses the concept of financialization to understand its emergence in the South African economy as an enabler and/or conduit of capital flight. This implies that financialization of the global economy enables ‘white capital’ to exacerbate capital flight (illegally) in the South African economy, leading to several macroeconomic issues. In the South African context, Ashman et al. (2011) and Fine (2012) finds that the consequences of capital flight and financialization in South Africa are: low economic growth rate;

increased financial investment as opposed to real investment; and increased income inequality.

To investigate financialization in South Africa, Ashman et al. (2011) explore the following variables: GDP growth rate; credit extension and investment as a percentage of GDP; and net capital formation and net acquisitions as a percentage of GDP. The choice of these variables is governed by the identified pass-through mechanisms of financialization. From figure 6, we can see that since the 2008 financial crisis, there has been a decline in the growth rate of the economy.

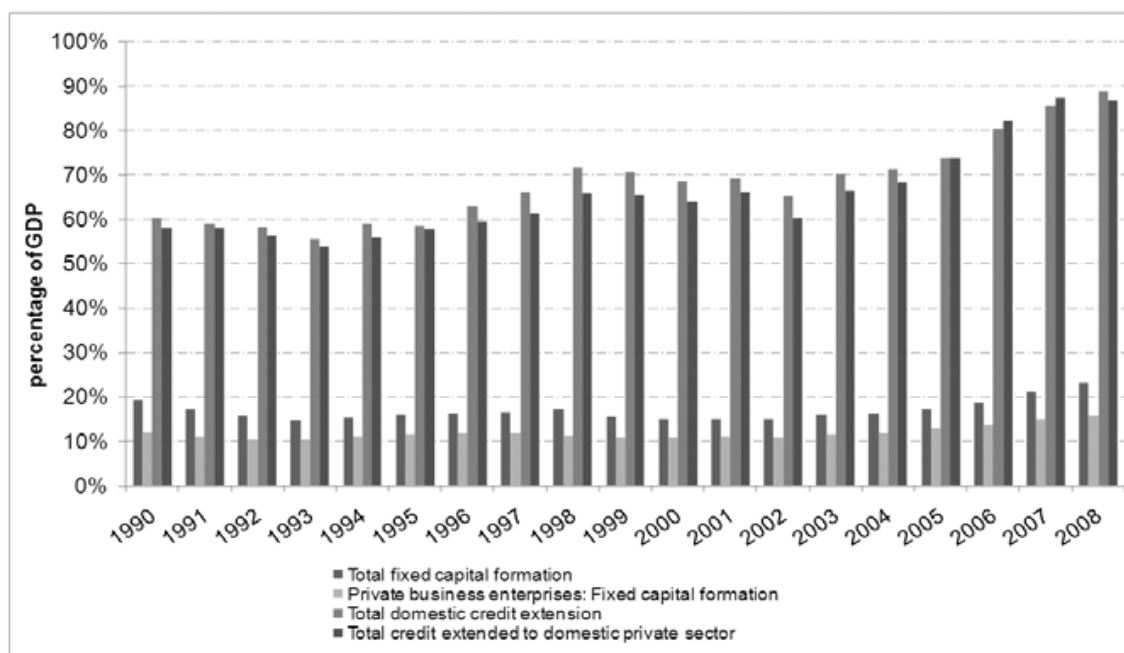


Figure 6: Credit extension and investment as percentages of GDP 1990 – 2008 (Data Source: SARB 2009). Adapted from Ashman et al. (2011, p. 184)

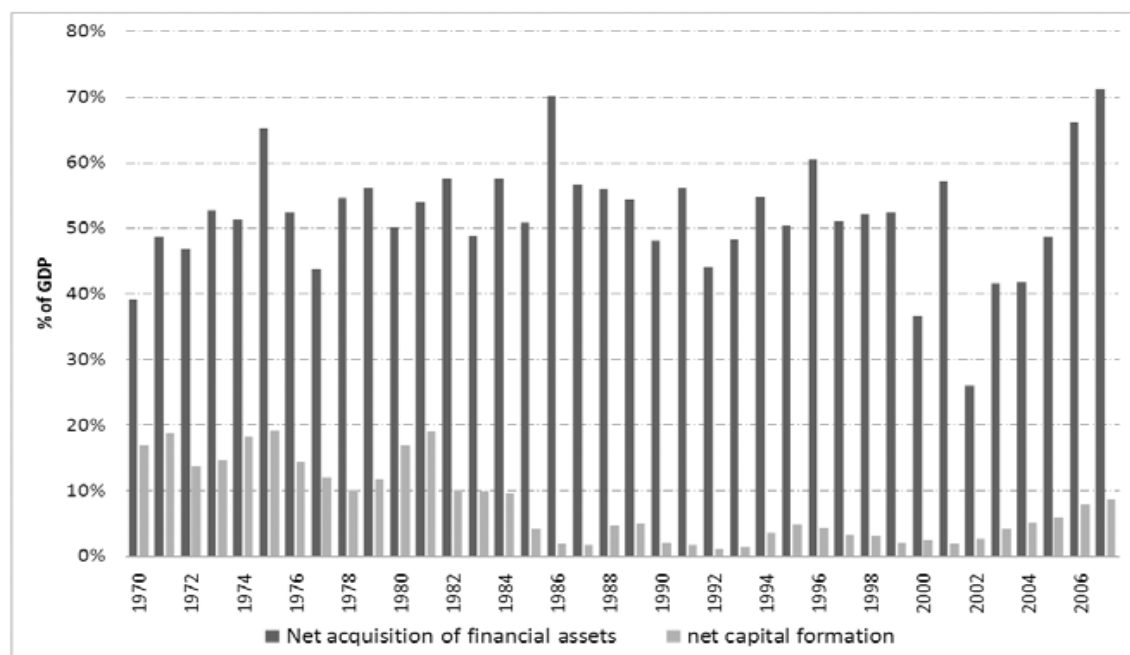


Figure 7: Comparing net capital formation and the net acquisition of financial assets as a proportion of GDP 1970-2007 (Data Source: SARB 2009). Adapted from Ashman et al. (2011, p. 184).

Figures 6 and 7 give South Africa's credit extension and investment as a proportion of GDP and net capital formation and net acquisitions as a proportion of GDP, respectively. One of the key features identified by Ashman et al. (2011) is the financialization of daily life, which has seen the steady growth or rise of credit extensions to households. From Figure 6, we can see that there has been an increasing proportion of credit extensions relative to GDP in South Africa. Although the credit extensions do not offer conclusive evidence of financialization in the South African economy, it is an indication of its penetration of everyday life. In addition, Figure 7 indicates that there has been an increase in net capital formation and net acquisitions by firms in the South African economy. This is consistent with the findings obtained by Milberg and Shapiro (2013) for the US economy. They found that this was an indication of the financialization of firms in the US economy. The figures contained in Figures 3 and 7 in this paper appear to be an indication of the same case for

the South African economy, that is, South African firms are becoming more financialized.

However, it is worth noting that the figures presented are an indication with further analytical and empirical research required to draw a conclusive argument. Ashman et al.'s (2011) and Fine's (2012) contribution to the body of literature on financialization are centred around its effects on households and not necessarily on firms. The focus on firms and firm behaviour in the context of financialization in the South African economy presents room for further research and exploration.

8. CONCLUSION

We have noted that there appears to be a negative relationship between financialization and accumulation in the *traditional* sense. As Milberg and Shapiro (2013) have noted, there is increased investment in financial innovation with firms having a preference for financial assets as opposed to real investment. Furthermore, with the rise in financialization, we note a shift in the firm's profit-generating strategy resulting in downsizing by firms, where production processes have been substituted with increased financial market activity by firms (with the aim of increasing profitability in the short run).

It still remains to be investigated further whether or not pricing behaviour by firms has been affected by financialization, however, as can be seen from above there is a link between financialization and the firm management's preference for higher profitability. From the literature above, we can observe several effects of financialization on firms. We can see that there appears to be a rise in shareholder value orientation by firms, with firm objectives being geared towards maximizing shareholder value and meeting shareholder preferences.

We can see that this (the rise in shareholder value orientation by firms) may have been brought about by the firm's preference for financing investment through internally generated finance, with equity dealings being preferred over increasing debt. What can also be concluded from the literature is that financialization has led to a decrease in capacity utilization in firms (with firms downsizing their production) and a rise in financial market activity by firms. This dynamic shift in firm strategy has led to macroeconomic problems like stagnation and rising unemployment and has led to the rising interest in the subject matter.

In the South African context, it is worth noting that although the research presented herein indicates evidence of financialization, more detailed empirical studies need to be conducted to provide an extensive analysis of financialization and its effects on the South African economy. Furthermore, more research into firms and firm behaviour in the context of financialization needs to be conducted in order to gain a better understanding of the micro foundations of financialization in the South African economy.

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