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Research Note: Pay Gaps Between Management and Non-Management Employees

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Abstract

This article examines the development over recent decades of growing 'pay gaps' between the pay received by management and non-management employees in firms. It is observed that pay gaps have been driven by non- management employee pay increasing at a greater rate than firm productivity gains and non- management pay falling below the rate of productivity gains. Examining this trend from the perspective of an institutional analysis of how firms set pay, it is concluded that pay gaps have developed mainly because of a dropping away of social norms supporting the passing on of productivity increases to all employees through industry wide bargaining. This has allowed management a free hand to take the bulk of productivity gains for themselves. It is argued that this pattern of pay distribution is less efficient than earlier practices in reflecting employee contributions to firm productivity. It is suggested that, to address this situation, social norms need to shift back to the earlier more efficient practices of ensuring a more even sharing of productivity gains through industry wide bargaining.

Key Words: pay gaps, management, employees, institutional analysis, social norms, collective bargaining

Introduction

The last few decades have seen a pattern of increasing income inequality in developed economies. In the later part of this period, the main driver of income inequality has been identified as being a widening pay gap between the top 10 per cent of income earners and the rest.

Recently, there has developed a growing acceptance among commentators that orthodox economic theories do not adequately explain why top end income shares continue to grow. As an alternative, commentators are increasingly turning to exploring whether these trends can be explained by institutional factors effecting income determination. Amongst other things, such analysis has noted a correlation between increasing income inequality between top income earners and the rest and decreasing union membership/collective bargaining rates.

This article will examine a particular aspect of increasing top end income shares – being widening 'pay gaps' between the respective earnings of management and non-management employees in firms. It will attempt to explain this trend through an institutional analysis of how pay is determined within modern firm structures, and in particular the effect of social norms on how management set pay and on levels of collective bargaining.

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The Pay Gap Issue

It is well documented that across OECD economies since the 1980s, there has been growing inequality amongst income earners. From the mid-1990s, this has been largely driven by a growing gap between the income of the top 10 per cent of income earners and remaining 90 per cent (Jaumotte & Buitron, 2015).

A major influence in the increasing top income shares has been a widening difference between what firms pay their top earners and the rest. Further, this trend appears to have been largely driven by management in firms receiving much larger pay increases than non-management employees.

For example, in the US over the last 30 years, the bottom 90 per cent of wage earners had a real wage increase of around 15 per cent as compared with 150 per cent for the top one per cent and 300 per cent for the top 0.1 per cent. In the US during the same period, pay ratios between CEOs and typical workers in firms increased from around 30:1 to 200:1(Stiglitz, 2013). In the UK during 1985-2011, the one per cent of wages earners had pay increases of 117 per cent, the top 10 per cent had an 81 per cent increase, while the pay of the bottom 10 per cent improved by 47 per cent (United Kingdom Office for National Statistics, 2012). During this period in the UK, there have been very significant pay increases for executive employees (Rashbrooke, 2013). In New Zealand, since the mid-1980s, income for lower and middle income earners has hardly moved in real terms. During the same period, the pay of the top 10 per cent of wage earners has risen by 80 per cent in real terms. The pay of CEOs has risen by this same amount since the mid-2000s (ibid.).

'Pay gaps' between management and non-management employees have been particularly prevalent in liberal market/Anglo-Saxon economies. An assessment of a basket of Anglo-Saxon against European/Japanese economy data revealed that up until the late 1970s, executive pay took up a similar share of firm income (five to eight per cent), but recent data shows that while, the share in European/Japanese economies have not significantly shifted, the share in Anglo-Saxon economies has jumped to around 15 per cent (Stiglitz, 2013). However, since the mid-1990s co-ordinated market economies are increasingly catching the pay gap disease. For example, in Germany, the gap between lower and higher income earners has been increasing since the mid-1990s, with real wages of union members hardly moving during this period (Bamber, Lansbury & Wailes, 2011).

While pay gaps tended to narrow coming out of the Global Financial Crisis (GFC), as the economic recovery took place they apparently widened again. In the US, the share of executive pay took a slight dip post GFC but since 2010 has risen back to pre GFC levels, (Stiglitz, 2013).

Distribution of Productivity Gains Driving Pay Gaps

Data seems to indicate that the pay gaps between management and non-management employees has been largely driven by an uneven distribution of distribution of productivity gains between the two groups (Laliberte, 2011).

In the US, there was a general correlation between pay and productivity in the decades before the 1980s. However, in the period from 1980 to 2005, US nonfarm business productivity rose

67.4 per cent but median weekly earnings of full time employees rose only 14 per cent (Levy & Tenin, 2007). In New Zealand since the 1980s, if the pay of lower and middle income earners had moved in line with productivity improvements their current pay should be about 25 per cent higher than it is at present (Rashbrooke, 2013). By contrast, increases in executive pay during the same periods, as noted in the previous section, have tended to be well above productivity improvements.

Of relevance to these trends is US pay research which indicates that there is a positive correlation between the profitability of a firm and the ratio of management to non-management pay. The data also shows that the greater profitability of the firm, then it is more likely that executives will have direct profit sharing aspects of their remuneration, such as bonuses and stock options. By contrast, the same data suggests that non-management pay tends not to correlate with firm profit but is determined at rates determined across a country wide labour market (Ma, 2014).

This all suggests that growing pay gaps are driven by non-management pay being determined by rates applying across the economy which fall below with improvements in firm productivity, while management pay takes the remaining surplus available for pay increases. The overall effect of these trends is that management has been largely taking firm productivity improvements available to be passed on as pay increases (Stiglitz, 2013).

Why is this happening?

Neoclassical Explanations for Pay Gaps

Neoclassical economic theories suggest that pay is determined by the marginal productivity of the last employee hired (Sloane, Latreille & O'Leary, 2013). As such, under optimum conditions the wage paid to an employee equates to the net benefit they bring to the firm (Stiglitz, 2013).

In recent decades in western economies, there has been a degree of structural change whereby skilled work has been lost out to overseas competitors and technology leaving a greater proportion of unskilled employees (Stiglitz, 2013). As such, the resulting drop in marginal productivity could potentially explain why the pay of some employees at the lower end of the pay scale has been stagnating.

However, this thesis is not supported by fact that there is no indication that the pay of skilled non-management employees is keeping pace with increases in productivity. Further, it does not appear that productive skills of management staff have improved anywhere near the significant degree that their pay has increased (Stiglitz, 2013). Overall, trends in increases in income inequality have been observed to not match the relative changes in marginal productivity of top income earners and the rest. Also, economies that have undergone similar levels of technological change have experienced different levels of pay inequality (Jaumotte & Buitron, 2015).

These incongruities may be explained by the fact that the marginal productivity wage theory is based upon a model that tends not to reflect what happens in the real world. It only truly operates in the rarefied atmosphere of perfect markets with homogeneous firms and labour who cannot individually influence the market. In these conditions, any firm paying less than

marginal productivity would lose all their workers to other firms who do pay marginal productivity rates. In reality, one would only tend to find these conditions occasionally, such as with teams of competing agricultural contractors operating within close geographical proximity to each other (Sloane et al., 2013).

Marginal productivity theory does, however, also provide modelling to take into account that firms do not operate in perfect markets. In imperfect markets, with an upward sloping labour supply curve (against which a firm can reduce wages and still retain employees), firms will attempt to employ at a wage and a number which will maximise their surpluses over labour costs. Labour (who can collectively bargain through unions) will attempt to bargain to a point where there is no surplus. In these circumstances, the exact wage and employment rate depends upon the bargaining power of firms and workers respectively (ibid.).

Within this scenario, sub-optimal pay rates to employees can be rationalised as being the result of firms exercising a disproportionate degree of bargaining power and suppressing wages (Stiglitz, 2013). This thesis is consistent with the fact that in the societies in which there has been significant increases in the income gap between the top income earners and the rest has also had contemporaneous declining union membership and collective bargaining coverage.

For instance, from 1980 until 2010 across advanced economies average union density rates fell from 47 per cent to 32 per cent and collective bargaining coverage rates from 71 per cent to 63 per cent (Jaumotte & Buitron, 2015). The decreases have been more significant in those economies experiencing the biggest increases in pay gaps between management and non-management employees. During 1980-2007, union membership in the United States dropped from 20.1 per cent to 11.9 per cent (Stiglitz, 2013). In the UK, collective bargaining coverage during the same period had dropped from 70 per cent to 27 per cent (14 per cent for the private sector) (Bamber et al., 2011). In New Zealand since the 1990s, collective bargaining coverage decreased from around 60% to its present level of about 17 per cent (Creighton & Forsyth, 2012).

Another explanation for pay becoming disconnected with employee productivity improvements in imperfect market conditions is that firms collude with each other in paying similar sub-optimal pay rates (pay matching). In doing so, firms hope to reduce the risk that their employees will find and move to another firm paying optimal pay rates (Sloane et al., 2013). This thesis is consistent with the pattern observed above of non-management employees being paid at economy wide rates.

While marginal productivity theory does offer potential explanations for some of the characteristics of pay gaps developing between management and non-management employees, there are some inherent limitations in using this approach.

Most significantly, in imperfect markets firms will generally be unable to ascertain the marginal productivity of employees (Sloane et al., 2013), and as a result it will not be possible to align marginal productivity with pay. Attempts to do so generally get it wrong and provide distorted incentives (Stiglitz, 2013). As such, even if the functioning of pay setting in imperfect markets could be improved, such as by measures to strengthen employee collective bargaining, it will be difficult to identify and adjust pay to optimal marginal productivity levels for management and non-management employees.

Recently, there has been increasing acceptance that, given the inability of neoclassical economic analysis to explain widening income inequality, explanations should instead be sought within the institutional background against which the developments have been taking place (Jaumotte & Buitron, 2015). In general, 'institutional analysis' focusses on social institutions that facilitate individuals achieving desired ends given the reality of bounded rationality and transaction costs. In the particular context of labour markets, Osterman defines "employment institutions" as a "coherent set of practices and rules of thumb that shape our expectations and guides the behaviour of both firms and workers" (Osterman, 1999: 54).

Institutional Analysis of Firms

In carrying out an institutional analysis of growing pay gaps between management and non-management employees within firms, a useful starting point will be to look at how institutional analysis explains 'firms' as they have evolved in modern society as productive organisations.

Of relevance is this regard is the relational contract theories of Ian Macneil. Macneil notes that in order to avoid the transaction costs involved with individual labour contracts most individuals agree to co-operate together by pooling their various specialities to produce products. These types of agreements are considered by Macneil to be "relational contracts" as they involve ongoing relationships between individuals. Macneil notes that relational contracts can take place within a variety of forms of co-operative organisations – the most common in modern times being employment within firms (Macneil, 1985).

The reason a particular firm structure is or is not successful as a co-operative framework at any particular point of time is not something that can generally be rationalised or articulated. As suggested by Hayek (1982), in all but the simplest organisation, the task of designing rules that will lead a number of individuals to work co-operatively and productively together will be beyond the capabilities of management.

Instead, Hayek suggests that a successful organisation will evolve over time 'norms' of behaviour that are adopted, not because they can be rationalised as achieving certain results, but because they have operated successfully in the past. The role of management will be limited to monitoring compliance with such norms, setting the goals to be achieved by the organisation, and assigning individuals particular roles within the organisational structure (Hayek 1982).

In the same context, Macneil refers to understandings, habits, customs, status positions, within organisational structures such as firms, as operating as "non-promissory exchange projectors", which give rise to "prescriptive norms", setting standards of "proper conduct" of the parties to relational contracts (Macneil, 1980).

Typically, norms operating within firms can be broken down as deriving from a hierarchy of sources. At the highest level, there will be broad "social norms" of behaviour that have their roots in the individual relationships in wider society. For example, minimum employment conditions, rules against unfair dismissals and prohibited grounds of discrimination.

Below this, there will be "industry norms" that tend to operate across firms generally. History shows that at any particular time the same types of firm structures predominate throughout a society. In this way management can adopt uniform successful practices rather than evolving

their own. This also cuts down on the information that a prospective employee will need to seek about a particular firm they are considering joining. Each firm will also develop its own "firm-specific norms". In this regard, firms will develop their own practices around their particular production processes and synergies between the individuals involved (Mundlak, 1999).

Below these levels lie the individual arrangements between management and the individual employee. This will include the contractual promises bargained at the outset of the employment. It will also in time cover expectations developed, but not committed to a promissory format, during the relationship (Macneil, 1980). (Contractually binding promises may also be bargained at higher than individual level by collective bargaining between employee and management representatives at a firm or industry level.)

In Macneil's view, it is essential in any firm that there be norms operating for the preservation of the employment relationships – or "contractual solidarity" – by maintaining "mutuality" between the parties. Macneil explains that such norms are involved in maintaining the minimum conditions that each party will require for it to remain worthwhile for them to continue in the relationship (Macneil, 1980).

When the parties do commit to contracting specific terms, such as pay, Macneil suggests that adjustments will in these circumstances be made under the norm of mutuality, involving the maintenance of a 'fair share' of the surpluses from the relationship. By this the parties will recognise that the relationship will not survive if "one side constantly gets too good a deal" and so they make necessary adjustments to existing divisions of proceeds, (Macneil, 1980), (for a more detailed analysis of the operation of mutuality type norms with firm structures see Sharp, 2012).

Determination of Pay Within Firms

Given this institutional view of firms, what can be said about how modern firm structures have developed to deal with the distribution of firm pay between management and non-management employees?

In this regard, of relevance is the firm modelling carried out by Alchain & Demetz (1972). Building upon the earlier insights of Ronald Coase (1937), this model describes employment within the "firm" organisation as containing monitors ("management") of the input of the remainder of co-operating specialists working within the firm ("employees"). Employment contracts are entered into between management and individual employees, under which rewards to employees are linked to input units ("wages") rather than the productive returns. Pay and conditions is contracted with the manager. Management are incentivised to carry out their monitoring tasks by being provided with a right to the surplus of the productive output of the firm after wages have been paid to other employees (Alchain & Demetz, 1972).

As such, under this model non-management employees would be paid a fixed rate depending on their work inputs and management would retain the remaining surplus as in incentive to monitor the firm's operation so that it operates efficiently. The model does not specifically refer to distributions to 'owners'/providers of capital, however even if this is taken into account then arguably it still offers a broadly realistic depiction of the current operation of firms.

Generally, non- management employee pay is usually largely determined as suggested by the model, in accordance with agreed rates based on the labour input that they provide, rather than their productive output. With regard to remaining surplus, small owner operated firms operate on the straightforward basis that owner managers take all of the surplus profit for themselves. With intermediate sized firms, where the owners are involved in management but also employ managers, the owner manager recognises that to keep employee managers sufficiently incentivised they need to receive a distribution of the surplus together with the owner. This may be by a set salary, together with profit sharing bonuses. With large/listed companies there tends to a more complete separation between management and capital 'ownership' – with dispersed and numerous shareholders often having little effective influence on firm management- and managerial domination of company affairs (Bainbridge, 2010). With such little influence shareholder's expectations typically may be not that all surpluses are returned to them but that they receive a dividend return that is competitive with other investments available on the market for similar levels of risk. This leaves the management group to retain the remaining firm surplus.

However, even if management do retain post non-management employee pay firm surpluses, they may still have to continue to revise non-management pay, in line with mutuality norms, so as to provide non-management employees with a sufficiently fair share of firm surplus to keep them from leaving the firm for better returns elsewhere. Although this may be an easier task than calculating the marginal productivity of each employee, in the real world it may still be very difficult and costly for management to continually review the pay of non-management employees to ascertain the appropriate 'fair shares' of firm surpluses required to retain them.

Industry Pay Norms

In practice, such 'market failure' issues preventing the setting pay at optimum levels between management and non-management employees, can be dealt with by management adopting 'industry pay norms' that employees will be paid in accordance with standard rates of pay for the generalised category of job they are placed into. As such, an employee may be employed as and paid the going rate for an "accounts clerk" even though the actual work and productivity that is involved with employees employed in this category between firms and particular employees may vary greatly.

Paying industry pay rates provides the advantage of certainty to management and employees. Management can adopt the rates relying on the fact that in the past firms have been able to employ at those rates and successfully continue to make a profit. Employees are saved the trouble of checking pay rates across firms.

However, the disadvantage of industry pay norms for non-management employees, as compared with being paid in accordance with firm specific norms, is that it detracts from pay competition between firms. Management no longer have the incentive to provide them with a fair distribution of firm surpluses to prevent them leaving to another firm. In order to balance this there will need to be alternative norms providing for revisions of pay operating at an industry level.

In this regard, industry pay rates for particular work categories may tend to move over time as demand for employees carrying out a type of job fluctuates. For example, if relative productivity of a certain category of worker rises, which in turn increases demand from firms,

firms facing a shortage will increase industry pay rates in order to attract other workers carrying out other types of jobs to change their careers and increase the pool of workers in demand. In this context, it has been observed that supply and demand factors can be useful in in explaining wage dispersion between skill categories of workers- but not as useful for explaining wage dispersions within those categories (Dinardo, Fortin & Lemieux,1996).

To the extent that economy wide productivity increases cannot be isolated to certain job types, there may also need to be wider norms dictating how the increased returns to firms are to be distributed. In this regard, analysis from the US suggesting that non- management wages are determined by the efficiency of a labour unit equalised across the whole of the economy (Ma, 2014), supports the thesis that there are industry wide mutuality type norms spreading economy wide productivity increases across employees of all firms.

Whether and how such 'industry pay mutuality norms' are followed will depend on the institutional nature of the particular economy. In particular, there will need to be high level social norms operating to guide cross firm cooperation by management to follow the pay norms and pass on a fair proportion of the general productivity improvements in non-management pay increases. The same social norms may also support industry wide bargaining power exercised by non-management employee unions, so that negotiations over the exact nature of industry wide pay movements can be settled. For practical purposes, this may also involve support for government intervention to establish centralised or extended bargaining, where pay movements negotiated by unions are passed on to non- union employees.

Such industry pay norms can be distinguished from opportunistic 'pay matching' under neoclassical economic theories, in that the norms are a legitimate response to information and transaction costs in determining optimal pay rates. However, as noted above, if management across industry opportunistically decide to not follow industry pay mutuality norms and fail to raise pay across the board for general productivity increases, then non-management employees are left in a similar situation with 'pay matching, where they cannot move to another firm in response.

If management do act in this type of opportunistic manner in not passing on productivity increase to non-management employees, and take the resulting increased firm surplus as pay increases for themselves, this provides a potential explanation for pay gaps developing between management and non- management employees.

It can be seen from the analysis above, that the key to this type of situation developing is whether or not there are operating high level social norms that guide management to co-operate in following industry mutuality pay norms to distribute general productivity increases fairly across all employees.

Changes in Social Norms Driving Pay Gaps

If one looks at the historical context against which pay gaps between management and non-management employees developed, there does seem to be a consistent pattern of changes in social attitudes towards pay setting within firms that were ultimately drivers in pay gaps developing.

For example, in the US in the post great depression period, the government promoted the view that the fruits of economic recovery should be fairly shared with employees as means of strengthening the underlying economy. These egalitarian values were carried on in the post WWII period of social and economic adjustment (Levy & Tenin, 2007). Unions, bolstered by the Federal Government providing them with rights to organise and strike, bargained industry wide collective agreements with employer groups. This, and union negotiated automatic wage adjustments across major industries, had the effect of spreading the post WWII prosperity across all wage groups (Bamber et al., 2011). However, with the business and government reacting to the economic downturn in the late 1970s' by withdrawing support for unions and industry bargaining (Levy & Tenin, 2007), there begun a devolution to enterprise and individual level bargaining that is recognised as resulting in widening pay differentials within firms (Bamber et al., 2011).

Similarly, in the UK up until the 1980s, there was support from government, unions and employer groups to the system of 'collective laissez faire'. This resulted in what were in effect industry wide collective agreements involving unions and employer groups. Changes of policy in the 1980s by the Thatcher Government and employer groups lead to a far greater degree of workplace bargaining (Bamber et al., 2011), and the development of widening top end pay inequality.

While this pattern of shifting of values away from industry pay norms occurred in other Anglo-Saxon 'liberal market societies' by the early 1980s, by contrast, in many of the more 'co-ordinated market economies', such as in Northern Europe, the government and social reaction to the end of the 'long boom' was initially not to abandon but to adapt their historical policies of non-market mechanisms such as industry wide bargaining between employee and employer groups. In this environment, there was initially not the same development of pay gaps as in Anglo-Saxon/ liberal market economies. However, following a further slowing down of economic growth, demands for more flexibility has led to increased pay bargaining in the workplace, reduced collective bargaining coverage, and widening top end pay inequality in co-ordinated market economies such as Germany (Bamber et al., 2011).

These historical patterns amongst advanced economies where pay gaps have developed show a general pattern of how changes in social values drove the development of pay gaps. Prior to the 1980s, the approach adopted by management to setting pay reflected the post great depression and WWII ethos of an egalitarian society resulting in management and non-management pay raises both keeping track with the significant productivity increases associated with the 'long boom' following WWII.

However, the end of the 'long boom' by the late 1970s changed this scenario. There came to be a widely accepted social view that the economic slowdown was the result of interference with the free operation of markets – especially the labour market (Bamber et al., 2011). As a result, government policy switched away from encouraging industry wide bargaining between employee groups and unions to promoting direct contractual bargaining at firm and individual levels.

Freed of legal and social expectations, management stopped co-operating in providing industry wide pay increases to non-management employees – and generally passed on as little of the declining firm productivity increases as they could get away with and still retain their workforce – which was made possible by management in other firms doing the same. Following the new ethos management also arranged their own contractual pay terms so as to

maximise their own short term self-interests, passing on much of any productivity increases to themselves.

The reason why following the changes in social norms there was initially a general increase in pay inequality (and not just in increase in top income shares) can perhaps be explained that middle income non-management employees not covered by collective bargaining were able to maintain their bargaining position to continue to obtain productivity based pay increases. However, in time as the new management ethos of not sharing productivity increases took hold and became widely accepted, the bargaining position of middle pay earners also came to be eroded and their productivity pay increases deteriorated.

Supporting Analysis

The thesis that pay gaps between management and non-management employees is ultimately driven by social norms as to the distribution of firm profits, and facilitated through industry wide bargaining, is certainly not one that has as yet broad academic support, but there has been an increasing amount of analysis and commentary along these lines.

Jaumotte and Bruitron, in their 2015 IMF report, identified across advanced nations a negative relationship between union density and levels of inequality between the top 10 per cent of income earners and the rest. Given that, overall, collective bargaining coverage rates have tended to vary proportionately with union density rates over the relevant periods (Pontusson, 2013), it would appear that these findings also suggest a negative relationship exists between collective bargaining rates and top end income inequality. Denk (2015) specifically reached this conclusion in finding that there is a strong negative correlation between collective bargaining coverage rates and the share of the top one per cent of wage earners across Europe by 2010 figures.

Evidence of any correlation between industry wide collective bargaining and pay gaps is less clear. Jaumotte and Bruitron (2015) suggest that centralised collective bargaining may in fact increase top end pay inequality through the exclusion of those falling outside the collective bargaining system (although with a caveat that further analysis was required). Scheve and Stasavage (2009) note that, although centralised bargaining can act to reduce top end pay inequality by compressing pay differentials, historically levels of centralised collective bargaining have followed movements in inequality rather than driving the trends, with changes ultimately being driven by underlying shifts in social/political norms as to the distribution of firm productivity. In the same context, they note that changes in norms and inequality do not always drive changes in centralised collective bargaining levels. For instance, they note that post WWII comparable reductions in income inequality were achieved in the United States, which did not have government imposed centralised bargaining, as in Western Europe, which did.

From the broader context of any correlation between income inequality and industry wide bargaining, these last observations need to be seen in context that, in the United States during this period, there was a significant degree of industry wide bargaining by the alternative route of co-operation of business, unions and government. But, on the other hand New Zealand in the 1980s provides an example of general pay inequality increasing despite the continuation of industry wide bargaining through a centralised/extended wage bargaining system, against a background of a socio-economic environment becoming dominated by free market

philosophies. Although, it was not until the 1990s after the centralised bargaining system was dismantled in New Zealand that there was a significant increase in top end pay inequality. (Rashbrook, 2013).

Overall, it would seem that some historical trends do support Scheve and Stasavage's argument that social norms may be able to drive pay inequality without commensurate changes to the degree of industry wide collective bargaining. But equally, broad historical trends, as referred to above, do show that eventually there is a correlation between levels of top end pay inequality and industry wide bargaining levels. However, in the end Scheve and Stasavage's analysis is consistent with the thesis of this paper that it is social norms that ultimately drive pay gaps between management and non- management employees.

Measures to Address Pay Gaps

If the conditions that allow pay gaps between managerial and non-managerial staff to develop are essentially driven by changes in broad social norms, then the issue of what should or can be done address this becomes a complex question.

Levy and Tenin (2007) argue that what is required is a general shift in government policies back to those that provided a more equitable distribution of productivity gains prior to the 1980s. Similarly, Jaumotte and Bruitron (2015) suggest that governments could move to adopt policies that would improve union membership as well as minimum wages. Laliberte (2011) argues for a need to relink pay and productivity through the facilitation of collective bargaining and improvement of minimum wages.

However, it must be kept in mind that government policy tends largely to be driven by social values rather than the other way around. As such, it may more be an issue of changing wider public views on how firm productivity should be distributed which will in turn lead to commensurate adjustments to government policy. In this respect, Storm and Naastepad (2011) suggest the need for 'social pacts' developing which involves a fair sharing of labour productivity growth and technological progress between business and labour.

In the past, the shifts in societal norms that influenced changes in pay gaps between managerial and non-managerial staff appear to have been triggered by socio/economic shocks. The Great Depression and WWII lead to norms of fair distribution, and the economic problems in the 1970s leading to the weakening of these norms (Levy & Tenin, 2007). It may be that it will take future shocks permeating throughout society that will lead to the changing of social values back to those which will allow a fairer distribution of firm productivity. The GFC was a significant global economic shock but, as noted above, it appears that this only momentarily stalled the growth in pay gaps, and further shocks may be needed to make a lasting impact.

Whether any such future social shocks occur may come down to the long term efficiency of growing pay gaps between management and non-management employees. If, as it appears, this does not reflect respective contributions towards productivity then this trend represents inefficient 'rent extraction' by management which will ultimately harm social welfare (Jaumotte & Buitron, 2015). Stiglitz (2013) refers to the current pay setting conduct of management as an example of game theory involving collusive behaviour by management exploiting market imperfections to their own benefit by controlling norms within firms to their advantage.

The consequences of inefficient distribution of pay within firms may already becoming apparent with advanced economies struggling to achieve sustained improvements in GDP post the GFC. In contrast with the recovery from the Great Depression, general wage growth has stayed stubbornly low and consumers are not leading economic recovery. Storm and Naastepad (2011) view the roots of this malaise lying in the delinking of the pay of the bulk of wage earners from productivity improvements. Jaumotte and Bruiton (2015) note that the current levels of inequality can lead to another crisis as those less well-off over borrow from the rich. If these economic trends continue and another economic crisis develops, then this may as a result be a shift in social norms, and as consequence government policy. There have been some indications of such shifts in social values beginning to develop.

Public pressure has resulted in ‘say on pay’ legislation, allowing shareholders input on executive pay, being passed in a number of countries. These include the Dodd – Frank Wall Street Reform and Consumer Protection Act 2010 in the US providing for a non-binding vote on executive pay for listed companies together with disclosure about relativity to performance and other pay levels within the corporation. A number of countries have also introduced similar restrictions on executive pay, especially in the financial sectors.

However, with such ‘say on pay’ reforms focussing on putting more power in the hands of shareholders, it may only result in redistribution between executive pay and shareholder dividends. To make inroads in closing the pay gap with non-management, employee reforms will need to give employees, as stakeholders, a say on setting pay levels. This may involve giving employees a secure ongoing basis for consulting with management over pay arrangements – such as Work Councils in Germany. There could also be provision for direct representation for employees on firm governance bodies – once again using the German example of statutory requirements upon larger corporates for employee representation on Supervisory Boards, which amongst other things set remuneration policies for management to follow (Bamber et al., 2011).

There have also been indications of public support for proposals to put direct restrictions on the maximum ratios of executive to lowest paid employees in public corporations, such as the proposal rejected by a 2013 referendum in Switzerland (when a ratio of 12:1 was rejected). If such measures were put in place for management to improve their own pay, they would need to drag other employee pay with them to maintain the ratios.

There has also has been in advanced economies increased levels of minimum wage as percentage of medium wages since the mid-2000s. Jaumotte and Bruitron (2015) have found that minimum wage levels set by governments has in some instances borne an inverse relationship to levels of top income shares. Similarly, the establishment of the national minimum wage in the UK in 1998 is attributed with significantly reducing the ratio between management and average non-management pay (UK Office for National Statistics, 2012). However, experiences such as in Australia illustrate that if minimum wages are only indexed to take into account cost of living increases they may not be effective in reducing top end income inequality (Bamber et al., 2011). To do so they will also need to increase with national improvements in productivity.

There does not, however, appear to be as yet any significant public support for a return to the levels of industry wide bargaining that existed up until the 1980s. This will be an important step for any real inroads to be made into pay gaps between management and non-management

employees to be made. This may involve a return to norms expecting management across firms to co-operate in passing on movements in industry pay rates, including for increases in productivity, that marked the ‘collective laissez faire’ in the UK and the US up until the 1980s. Alternatively, there could be a return to centralised or extended bargaining, as operated in the past in countries, such as New Zealand.

Can governments do anything to drive these or any other institutional changes that will address pay gaps? Certainly, governments should not stay passive until another socio/economic crisis drives changes in social values, but should try to drive support for policy changes to address the problem.

For example, there has, in the past, been a tendency for governments to benchmark public service executive pay to private sector rates. Instead, it could be accepted that the private sector levels are not appropriate benchmarks for setting pay levels. Given that, in many developed economies, the public service makes up a significant part of the total workforce, this could be a powerful influence in establishing better norms for appropriate levels of management pay.

Conclusion

In conclusion, an institutional analysis of how firms operate and set pay provides an explanation for the growing pay gap between management and non-management employees in many advanced economies. The key insight is that the growth in pay gaps since the 1980s has been largely driven by changes in social norms as to how pay is to be distributed amongst employees in firms, and resulting changes in support for industry wide collective bargaining.

Prior to the 1980s, the prevalent social norms were shaped from the time of the Great Depression and WWII, and provided that management of firms should co-operate in bargaining with unions industry wide pay rates for all employees that kept pace with general productivity gains. From a social welfare perspective, this approach to pay setting can be seen as a relatively efficient way of keeping all employees pay broadly in line with productivity gains, given the practical issues of attempting to adjust pay to reflect the marginal productivity of individual employees. During and following ‘long boom’, advanced economies experienced good productivity gains which were shared in pay for both management and non-management employees.

However, with economic shocks and slowing productivity gains of the late 1970s, social norms shifted away from the sharing of productivity increases across all employees and from industry level to firm or individual bargaining. These shifts in societal norms gave management the encouragement and freedom to depart from previous practices of passing on general productivity increases to non-management employees. Instead, management appears to have reverted to ‘pay matching’ with other firms in offering little, if any, firm productivity gains, and passing on the bulk of the gains to themselves. The resulting growing pay gap that has developed between management and non-management staff can be seen as contrary to social welfare in that these trends are not reflective of changes in respective productive contributions.

The answer to addressing pay gaps lies in a further change societal norms, which may require another socio/economic shock to bring this about. There may already be indications of such a crisis developing given the current persistently low rates of productivity and wage growth across developed economies. Hopefully, however, responsible governments will foresee such

risks and attempt to guide societal and business support back behind a fairer distribution of productivity gains across all employees.

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