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Reading the Spring 1993 edition of *Studies*<sup>9</sup> prompted the question - is the search for a solution to the present unemployment problem too narrowly focused? The papers in that edition, like much of the literature, are written primarily from an economic perspective. Of particular concern is the minimal attention which is being paid to the significant changes that are taking place in society both within Ireland and internationally as a result of the deployment of labour displacing technologies. These changes are without precedent in terms of their scale, pervasiveness and above all the rate at which they are occurring.

The conclusions of this paper derive from the principle that when a technology is deployed minimal benefits are achieved and problems follow if insufficient attention is paid to harmonising the use of that technology with the work practices and lifestyles of people.

The principal conclusions of this paper are that:

- (1) The current unemployment problems are largely attributable to the deployment of labour displacing technologies whilst minimal attention is being paid to the need to transform some of society's institutions and behaviour patterns. As a consequence, and as is normal when these people related issues receive inadequate attention, only some of the desired benefits have been realised from productivity improvements achieved by the use of technology. At the same time certain problems have become worse, most notably that of unemployment.
- (2) Initiatives which address people issues will reduce unemployment. They are a necessary and major part of the solution. Consequently, any proposal to solve the problem which does not vigorously address the people issues will, at best, have a marginal effect.

Put another way, spending the Maastricht funds is the easy part. The difficult and essential part is receiving minimal attention - making the real changes to our social institutions which are necessary to achieve a more equitable distribution of work and income amongst all members of society.

### **Jobs are being displaced at an ever increasing rate**

The rate at which employment patterns are changing is important. In general the faster the rate of change the greater the probability, at least in the short term, of serious and disruptive social stress particularly when that change is accompanied by notable improvements in productivity.

The agricultural revolution took thousands of years to spread around the world from its initial conception in the Middle East about 8000 BC. It took some ten thousand years for various labour displacing technologies to develop to the stage where now only eight percent of those employed in the industrial countries work in agriculture. That proportion is continuing to

reduce. The corresponding figure for the world as a whole is now less than fifty percent<sup>11</sup> Page 200.

In contrast to the millennia it took for agriculture to spread around the world, the industrial revolution spread through the now developed world in about one hundred years from its conception in England in the 1780s. Industrial employment grew rapidly from the beginning of the industrial revolution. It peaked in the middle of this century, less than two hundred years after the commencement of the industrial era. It is now declining as knowledge of how best to use certain technologies is being used to improve the quality of many goods and services whilst simultaneously reducing the demand for labour.

Now consider service sector employment. Employment in the service sector grew rapidly during the second half of this century. That sector now accounts for over sixty percent of employment in most developed nations and for over seventy percent in the United States. It is continuing to increase. The medium term prospects for employment growth in certain service sector activities will be influenced by the rapid development and deployment of information technology. In less than fifty years information technology has permeated many aspects of economic life - a very rapid rate of deployment when viewed in a historic context.

Organisations are now capitalising on the computational abilities of computers, the availability of powerful communications systems and the miniaturisation of many components. These capabilities are being used to change the world into a global village, to transform the nature of work and to improve the quality of many products and services. Labour is being displaced at an accelerating rate as a side effect of the use of these technologies in these ways. As knowledge of how best to use these capabilities improves employment in the information processing sections of the services sector will follow the pattern of employment in the agricultural and industrial sectors and decline. This is already happening in sectors such as retail banking and in certain utilities. It is likely to accelerate (e.g., Business Week Ref: (1)). In each case the decline in employment is attributable largely to the use of labour displacing technologies.

It is salutary to reflect on a quotation from a recent article in the Financial Times<sup>8</sup> in which the views of Percy Barnevik the Chief Executive of Asea Brown Boveri were quoted as follows:

"If anybody tells me, 'Wait two or three years and there will be a hell of a demand for labour', I say tell me where. What jobs? In what cities? Which companies? When I add it all together I find a clear risk that the 10 per cent unemployed or under employed today could easily become 20 - 25 percent."

Barnevik speaks with the experience of having shed 50,000 jobs in four years while simultaneously increasing output by 60 per cent to \$29 billion in 1991.

Whilst this quotation may be criticised as being a special case which may not tell the whole story it is more difficult to say the same of the concerns expressed in the UNDP's 1993 Human Development Report<sup>11</sup> in which they state that "Since 1975, employment growth has consistently lagged behind output growth, and this gap is likely to widen in the 1990s". The report goes on to suggest that "We are beginning to witness a new phenomenon - *jobless growth*". That phrase may be insufficiently pessimistic in tone. There is no reason why economic growth can not be accompanied by a decline in jobs. For example, between 1973 and 1987 that is what happened in France, Germany and the United Kingdom.

During the period from 1975 to 1990 the UNDP's report indicates that GDP grew by forty nine percent whilst employment in the OECD countries grew by only twenty percent. Looking

forward to the period from 1990 to 2000, the report forecasts that in the OECD countries the labour force will grow slightly faster than employment, employment levels being forecast to grow by four percent and the labour force by five percent. GDP in those countries is forecast to grow by twenty eight percent or seven times the rate of growth in employment. Clearly human productivity is improving at accelerating rates. FÁS and ESRI forecasts of Irish employment to 1996<sup>4</sup> Page 14 also imply significant productivity improvements.

These comments ignore the matter of potential entrants to the labour force who are discouraged from so doing by the severity of the unemployment problem, a matter which adds to the seriousness of the problem.

Clearly, any attempt to solve the unemployment problem is doomed to failure if it does not address the issues of changing employment patterns, of ongoing and accelerating human productivity improvements and of the aspirations of an increasingly well educated and informed people.

### **Implications for today's unemployment problem**

As a general rule, if a major component of a system is changed then other components have to be changed for the system to realise the potential benefits offered by the changed component. The demand for labour is a major component of the social system. That component has changed significantly as have underlying economic factors which determine the demand for labour. The implication for today's unemployment problem is that complementary changes are urgently required to those social institutions which are intended to achieve an equitable distribution of work and income. In other words, in a changing world the solution to the unemployment problem requires even more change.

It is not feasible to reverse the clock and revert to the world of the sixties and seventies when significantly lower levels of unemployment were the order of the day. A combination of technical and behavioural changes are required. To date there has been considerable emphasis on technical matters such as establishing strong economic fundamentals and improving infrastructures. Progress has been made but some significant desired benefits such as reduced unemployment have eluded society. Why? At least partly because grossly inadequate attention has been paid to adapting some social institutions to meet the changing needs of people in the emerging post industrial society. Making progress in this area will be difficult but the potential reward is worthwhile being a more just and harmonious society.

People issues are important because society is a large complex system. For any system to operate to its full potential requires a harmonious blending of people and technology. If the two are not in harmony the system will operate below its potential. It may even fail. In essence, making successful use of technology is often primarily a people issue. Once the technology has been developed, deriving benefits from it is seldom a technical problem. In the case of Irish society minimal attention has been paid to the social changes necessary to harmoniously blend recently deployed labour displacing technologies with the needs of society. As a consequence, and as is normal when people related issues receive inadequate attention, only some of the desired benefits have been realised from the technically oriented initiatives whilst at the same time certain problems have become worse, most notably that of unemployment.

### *Addressing the people issues will reduce unemployment*

In the past when per capita income levels were lower there was less unemployment. On a per capita basis the Irish people are now better off than ever before. Yet more people are unemployed whilst others are suffering from overwork. This is indicative of an attitudinal, behavioural and motivational problem. Continuing to throw money at the problem is, at best, not remotely sufficient to produce a solution to what is a structural problem in society. At worst it may be a waste of scarce resources.

The solution to the problem requires the transformation of some of society's institutions and behaviour patterns so as to achieve a more equitable distribution of work and income. This is not a technical issue in the traditional sense. It is a challenge to the vision, commitment and leadership abilities of people at all levels and in all sections of the community.

Given that the national income is finite at any given time society could adopt policies which encourage the establishment of well paid jobs for some with many being made members of a large involuntary leisure class. Alternatively policies could be adopted which encourage a more equitable distribution of paid work. Such policies would probably encourage relatively low wage service sector jobs. What is clear is that there are choices. Irish society can decide, possibly by default, to continue with policies which provide work to a privileged comfortable section of the community whilst an increasing number of people have no paid work. If that is the wish of the Irish people, so be it. Alternatively, society can decide to change direction and adopt policies which create a more caring and equitable society. In the light of the profound changes which are taking place in the world it is time to seriously consider policy options which move society firmly towards the latter goal.

An alternate approach would be to control the deployment of technology. In theory this may be possible. In practice it is almost impossible for Ireland, as a small open economy, to adopt this approach except in a small number of cases where it is widely agreed that the deployment of a technology is detrimental to society. For this reason the option is not considered further in this paper.

### *The direct tax and social welfare codes*

The direct tax and social welfare codes provide an excellent example of social institutions that need to be transformed. They discourage individuals from seeking work who find themselves unemployed and who have low income prospects. Such individuals find that they have little or no incentive to work because the value of their social welfare benefits exceed that of their potential after tax earnings. This was well documented by Dowling in 1978<sup>5</sup> and more recently by Tansey in 1991<sup>10</sup> and has been referred to by many other writers. These codes are tending to force people into two increasingly artificial classifications - employed and unemployed - and to make it difficult for individuals to move from the informal economy into the formal economy. Hence these codes tend to aggravate the unemployment problem. If their fundamental behaviour influencing characteristics remain unchanged the unemployment problem may be insoluble.

The fact that the problem was well known in 1978 and continues largely unresolved to this day might be regarded as indicating a lack of serious commitment by successive governments to vigorously addressing the issue. It is not apparent how continued inaction can be justified given the irreversible nature of the changes which are taking place in Irish society. In this context, the recent decision by the Government to establish a working group on the integration of the tax and social welfare systems is to be welcomed. It is to be hoped that it will result in more action to resolve the well documented problems than has been the case in the past.

### *Employment legislation*

There has been much comment to the effect that employment protection legislation has tended to be good for those at work, to act as a disincentive to employers taking on additional staff and to encourage the replacement of labour by capital. This provides another example of a social institution which aggravates the present unemployment situation.

A similar Government initiative to examine options in this area is required to that taken recently in relation to the tax and social welfare systems.

Comments could be made about other social institutions such as the balance of power between central government and local communities, the emphasis currently placed in education on training for a job vis-à-vis educating for life, job creation policies and retirement policies to mention but a few. Wherever one looks the consistent message is that the solution to the unemployment problem must involve the transformation of social institutions in ways which encourage people to achieve their full potential.

### *The solution will involve sacrifice at least in the short term*

It may be that "the solution will require that the comfortable become less comfortable so that the struggling may struggle less" to quote a sentiment expressed by Father Peter McVerry<sup>6</sup>. Given the appalling social costs of the present situation this possibility should not be an obstacle to progress if community leaders can be persuaded to pursue a solution with single minded determination. Possible adverse effects on the comfortable are likely to be eased to a significant extent by an associated rising tide which should lift many boats. Change can result in a 'win win' situation.

For example, analyses of options for redistributing income (e.g., consideration of the concept of negative income tax by the Commission on Taxation<sup>3</sup>) have tended to assume a static situation. There is often an implicit assumption that there would be no beneficial dynamic effects. This is understandable given the difficulty in estimating the dynamic effect of changes to the direct tax and social welfare codes as noted by Callan<sup>2</sup>. It may be that the conclusions of the Commission on Taxation would be unchanged if reviewed from a total social systems perspective in the context of today's emerging post industrial society and account was taken of the dynamic effects of negative income tax. The reverse is also possible. In general, it is difficult to accept that any conclusion about the overall effects of possible changes to social institutions is valid if it is not supported by an assessment of the probable dynamic effects of such a change. Such effects can be beneficial.

### *Should the concept of unemployment be made redundant?*

Formulating a solution to the unemployment problem demands creative thinking. For example, in today's society, where there is a continuum of life styles between unemployment, under employment and full employment, between leisure time and working time and between consumer and prosumer (individuals or groups of people who consume their own produce thereby bypassing the formal economy), is the time approaching when the concept of unemployment should be made redundant? Are unemployed persons who look after youth groups or who create works of art really unemployed? Is it appropriate to designate a prosumer as being unemployed? Ignoring the non trivial issue as to how society might make the concept of unemployment redundant, it is not obvious that the answer is no. To progress the idea a little - it may help in formulating a solution to the unemployment problem to imagine a green field situation for which one is required to design a post industrial society which does

not involve the concept of unemployment. Such an exercise might point the way towards the most important changes which are required to today's social institutions. The political feasibility of implementing the required changes could then be determined.

## Conclusion

A system can not perform well if there is a material mismatch between major components. In the case of many developed societies a material mismatch between work practices and lifestyles on the one hand and society's institutions and behaviour patterns on the other is aggravating the unemployment problem. It is not surprising that the problem is becoming more severe as the mismatches becomes worse.

A combination of technical and behavioural changes are required. Valuable progress has been made in technical areas such as establishing strong economic fundamentals and strengthening various infrastructures. It is now time to vigorously transform those social institutions and behaviour patterns which are aggravating the unemployment problem. Such action, which implicitly addresses behavioural and people issues, is a necessary and major part of the solution to the unemployment problem. The Irish people must avoid doing nothing about these issues like a rabbit mesmerised into fatal inactivity by oncoming headlights. The issues can and should be identified, action decided upon and a real beginning made to solving the unemployment problem.

On the assumption that ultimately mankind discovers how to avail of the wide range of life choices made possible by increasing productivity "there will be no harm", as Keynes wrote in 1930<sup>7</sup>, "in making mild preparations for our destiny, in encouraging, and experimenting in, the arts of life as well as the activities of purpose." Technology presents society with great challenges. Hopefully there are sufficient people with the vision and courage necessary to avoid the pitfalls and grasp the opportunities.

## References

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