Globalization, Social Welfare, Labor Markets and Fiscal Competition

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Globalization, Social Welfare, Labor Markets and Fiscal Competition*†

by

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Abstract

Globalisation, Social Welfare, Labor Markets and Fiscal Competition

Begins by noting growing inequalities in labor markets, suggesting reasons for this and pointing out that even if globalisation increases economic efficiency and stimulates economic growth in higher income countries, it can reduce social welfare in these countries via adverse impacts on the distribution of income. When all commodities are easily traded internationally, the income and employment conditions of relatively unskilled or inexperienced persons in higher income countries are likely to decline with globalisation, whereas the opposite trend is apparent for skilled or experienced employees. Biased and faster technological change arising from globalisation strongly reinforces or adds to such an effect. The motives fostering such technological change are not purely defensive; far from it. However, if the presence of non-traded commodities is substantial and if the influx of unskilled labor from abroad is restricted, heightened demand for non-traded goods from skilled persons enjoying higher incomes can stimulate increased demand for the services of the less skilled in higher income countries, thereby giving rise to a counter effect in their case. But in practice, this counter-effect is swamped by the primary effect. Furthermore, it is noted that gross income inequality in a country can result in a Rawlsian-type loss. In such a case, less inequality will benefit all.

Growing globalisation and reliance on markets in higher income countries is associated with widening employment and wage differentials. These disparities are especially noticeable in relation to age. It is suggested that these age-differences reflect to a large extent differences in skills and experience. These patterns accord with the broad predictions of the theory of markets and are further supported by consideration of transaction cost theory.

Globalisation has increased international fiscal competitiveness. This gives rise to a global prisoners' dilemma-problem, and is likely to result in under investment in infrastructure and in human capital. Both national and global social welfare are liable to suffer especially in the long-term. International cooperation is needed to avoid this problem.

GLOBALISATION, SOCIAL WELFARE, LABOR MARKETS AND FISCAL COMPETITION

1. INTRODUCTION

There is a widespread belief that structural adjustment policies and globalisation will increase economic efficiency and social welfare. Furthermore, in some countries, e.g. in Australia, it is believed that increased competition in labor markets can lead to increase employment as a result of increasing international competitiveness of the production of traded commodities. In addition, several nations, e.g. Ireland, appear to be engaged in international fiscal competition, through the lowering of tax rates to encourage foreign direct investment and business investment. In turn, this results in reduced provision of government services which includes in most cases, welfare services.

The purpose of this article is to point out that increased market competition and globalisation, even if they increase economic efficiency and stimulate economic growth, may reduce social welfare. Furthermore, increased market competition associated with globalisation may result in a small increase in employment as well as uneven income and employment benefits between professional and highly skilled personnel, and unskilled laborers. Thus it is likely to be associated with growing inequality of income and employment opportunities for different categories of labor. In addition, international fiscal competition can result in a prisoners' dilemma–like problems resulting in a Paretian inferior outcome globally. Consider each of these matters in turn.

2. INCREASING LABOR MARKET INEQUALITY IN OECD COUNTRIES

It is well documented that since the 1970s, OECD countries have exhibited economic growth and growing income inequalities. This is contrary to Kuznets' (1955) theory. To a

considerable extent this trend is reflected in the growing divergence in conditions of work for skilled employees compared to unskilled workers or those with limited skills. Depending on the countries concerned, these differences are reflected in diverging wage or salary levels, widening levels of non-wage entitlements, growing gaps in job security and differences in unemployment rates with low skilled employees being relatively disadvantaged.

Controversy exists about the reasons for this growing inequality in OECD countries. Some writers attribute these trends primarily to technical change in developing countries which reduced the demand for semi-skilled and unskilled labor, rather than processes of globalisation (Lawrence and Slaughter, 1993; Krugman, 1996; Aghion and Williamson, 1998; Slaughter, 1998; Dawkins and Kenyon, 2000) whereas others see globalisation as the prime influence, but not necessarily the only important influence on the trend (Sachs and Shatz, 1994; Wood, 1998). The latter seem to be the minority in the economic literature.

In practice, it may be impossible to determine how much of the divergence in labor markets in OECD countries is due to technical progress divorced from globalisation, and how much is due to the process of globalisation. Both factors may well be important in explaining the bifurcation of labor markets and to a considerable extent technical change itself appears to be influenced by the globalisation process.

Slaughter (1998, p.1452) claims that "the consensus is that trade accounts for a positive yet relatively small share of the rising inequality" between more-skilled and less-skilled workers. However, this view is not shared by all, and one cannot conclude in any case from it that the process of economic globalisation is not an important contributor to the bifurcation of labor markets in OECD countries because globalisation involves much more than reduced barriers to trade. In fact, Wood (1998, p.1468) marshalls persuasive evidence that "the main cause of the rise in labor market inequalities [in OECD countries] is globalisation."

The Hecksher-Ohlin model in conjunction with the Samuelson-Stolper theorem (Stolper and Samuelson, 1941; Samuelson, 1948) provides a possible explanation of the bifurcation process. As a result of reduced barriers to trade, and the operation of the Samuelson-Stolper theorem, labor in plentiful supply internationally (unskilled labor or low-skilled labor) may find that its net wage declines in developed countries whereas the income of professionals and of highly skilled persons rises because their labor is in short supply internationally. One might expect unskilled labor-intensive industries to decline in more developed countries and industries using higher intensities of human capital to expand. Given increased mobility of physical capital, even industries with high physical capital intensities may not be retained by more developed countries unless professional/human capital complementary requirements make this desirable.

Several authors, however, argue that the operation of the Samuelson-Stolper theorem within the Hecksher-Ohlin framework contributes little to explaining the bifurcation process. Dawkins and Kenyon (2000, p.8) argue that the Stolper-Samuelson theorem is not met because the ratio of unskilled to skilled has not increased in all industries. Aghion and Williamson (1998, pp.42-43) claim that trade is not a significant explanation because the demand for unskilled workers has declined in all industries including the non-traded sectors which do not compete with developing countries and Krugman (1996, Ch.3), argues that an explanation based on the Samuelson-Stolper theorem is inadequate.

On the other hand, Wood (1998, pp.1465-1466) states that the Samuelson-Stolper principle plus the presence of 'defensive-innovation' in higher income countries helps explain the bifurcation. Defensive innovation in more developed countries is considered to show bias resulting in reduced employment of unskilled labor. There is also a tendency of industries with high intensities of unskilled labor use to move offshore from higher income countries as globalisation proceeds. In addition, increased outsourcing to labor countries of

components of production incorporating high relative use of low-skilled labor is liable to occur with globalisation. As shown by Feenstra (1998, p.32), as soon as trade in intermediate inputs is allowed, "globalization has an impact on employment and wages that are *observationally equivalent* to the changes induced by technological innovation". In other words, the introduction of outsourcing helps to explain why via the globalisation process the demand for unskilled workers has declined in all industries including the non-traded sectors. Furthermore, it seems that globalisation has improved the bargaining position of capital relative to lower-skilled labor in higher income countries. Feenstra (1998, p.46) observes "The impact of globalisation on changing the bargaining position of labor and capital has far reaching consequences. The decline in union power within trade-impacted industries may well account for a portion of the increased wage inequality in the United States (Borjas and Ramey, 1995)", and possibly in Australia. Feenstra (1998, pp.47-48) also points out that "the decision of companies to spread production across countries [by outsourcing] has distributional consequences that cannot be ignored. The position of low-skilled workers in industrial countries is worsened by a complementary combination of globalisation and new technology".

An important issue is to determine to what extent technical change is biased against unskilled or lower-skilled labor, to consider the extent to which globalisation promotes this bias and to identify the mechanisms arising from globalisation which help generate this bias. Wood (1998) suggests that the technological bias is a defensive reaction of firms in OECD countries to competition arising from globalisation. This may be so in some cases. But this bias may also be the result of proactive competitive strategies of multinational companies headquartered in higher income countries, rather than purely a result of a defensive reaction.

Globalisation increases market competition and also widens opportunities for foreign direct investment and trade in intellectual knowledge. It may foster the neo-technology

elements of international trade and enhance the opportunities for temporary monopoly profits from international trade and investment based on new technologies (cf. Posner, 1961; Hufbauer, 1996; Teubal, 1975). It is possible that such technologies will be knowledge-intensive, involving components of knowledge and highly skilled labor embodied in equipment, rather than requiring much unskilled labor for their production and use. It is likely to be easier to patent such technologies and/or defend property rights in these than in the case of technologies which make intensive use of low-skilled or unskilled labor. Globalisation, by both extending the market for goods and services produced by knowledge-intensive technologies as well as extending the scope for foreign direct investment or other forms of commercial transfer of such technology, helps promote technological change which is biased against the employment of unskilled labor. Increased international competition may also reduce the length of time for which monopoly-profits can be earned from new technologies. Thus companies must accelerate their processes of technical advance unless their profits are to fall. This treadmill effect further increases the bias against the employment of unskilled labor. If this view is accepted, it would follow that while bias against unskilled or low-skilled labor and in favour of skilled labor would arise from technical change in the absence of significant globalisation, increasing globalisation greatly strengthens this tendency. This hypothesis does not appear to be inconsistent with the findings of Bound and Johnson (1982) nor with those of Berman *et al.* (1994) which emphasize the importance of biased technological progress for labor market bifurcation.

It is pertinent to observe that countries which are technological leaders globally (the more developed countries) have been in the forefront of efforts to internationalise the world economy. Globalisation provides market expansion opportunities for their technologically advanced industries, even though at the same time these countries have experienced severe labor market bifurcation. Furthermore, this process of globalisation generates self-reinforcing

tendencies. It increases the potential economic profits from a new international saleable product or technique, yet it simultaneously increases international competition, thereby making continuity innovations even more necessary to ensure the long-term survival of many firms. Thus, it may accelerate the treadmill of technological change and reinforce its bias against the use of unskilled or low-skilled labor in higher income countries.

3. INCREASED ECONOMIC EFFICIENCY AND GROWTH ACCOMPANIED BY REDUCED SOCIAL WELFARE

Globalisation is widely believed to increase economic competition, stimulate economic growth and promote economic efficiency. Advantages are seen to include an improved allocation of resources internationally and the promotion of technological progress worldwide. Nevertheless, globalisation may reduce social welfare if it results in considerable inequality of income, as seems to be occurring in more developed countries. At least it can do this in higher income counties on a major scale given its Samuelson-Stolper like impacts plus more significantly its stimulus to the development and application of new technologies and products which save on the use of lower-skilled labor. The increased pace of technological innovation and its growing bias against less-skilled labor is not just defensive as Wood (1998) suggests but more importantly is a proactive competitive reaction to globalisation which opens new opportunities for profiting from new technologies, especially for established multinational companies or nascent ones.

The possibility of a deterioration in the social welfare of a more developed country as a result of globalisation can be illustrated by Figure 1. For simplicity, assume a two-person society with individual one dependent on a globally plentiful resource for income and individual two on a globally scarce resource for income. Let the curve CDE represent the utility-possibility frontier for the society prior to globalisation and assume that the social

welfare indifference curves of the Bergson-type represented by W_1W_1 , W_2 W_2 etc apply. These allow for some trade-off of inequality in income. Now suppose that prior to globalisation, the economy is located at point, A. It is Paretian inefficient. After globalisation, its utility possibility frontier moves up to C'D'E' either because a greater-resource base becomes available or as a result of economic growth. Suppose now that the economy moves to point B. It is then fully efficient (in the static economic sense) and it has experienced economic growth but the social welfare of the society has declined.

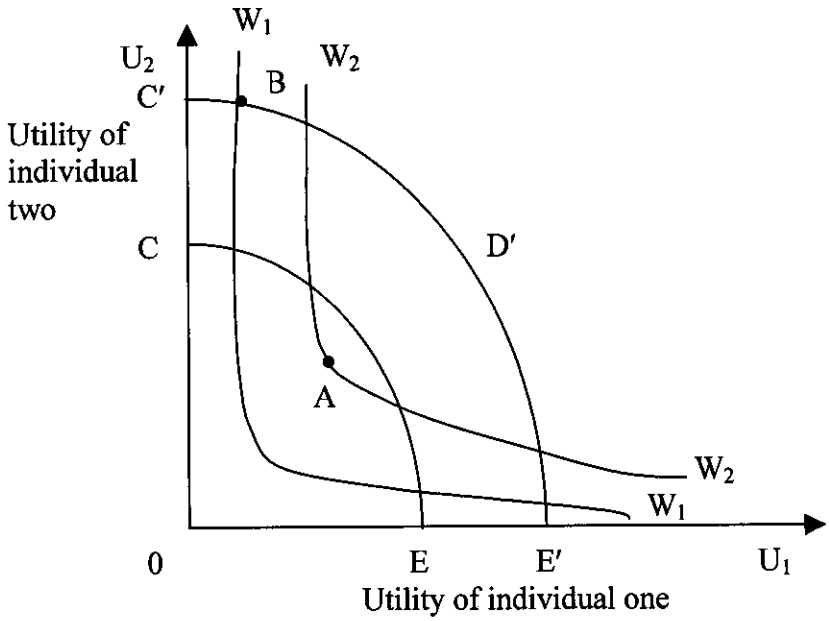

Figure 1 *Decline in social welfare as a result of globalisation*

Note that this result is possible even if the utility received by each of the individuals is considered to be perfectly substitutable. This is so if the social welfare indifference curves are straight with a rate of indifferent substitution of unity.

However, the situation may be worse in reality than is apparent from Figure 1. For extreme inequalities in income, the utility possibility frontier may bend back on itself in the

manner shown in Figure 2 by the curve BCDEF. This indicates that great inequality lowers the utility of all parties. For instance, extreme inequality could drive the economy to point G. In fact, the efficient set is only confined to the segment CDE. Note that this 'recurved' effect may arise because gross inequality may increase crime or place a social welfare redistribution burden on the better off members of the community. These have disincentive impacts on production. Furthermore, the recursive effect does not imply that equality of income is desirable, that is, that income distribution should be along the 45° line OL in Figure 2. In fact in the case shown, inequality would be optimal even if Rawlsian social indifference curves (right-angled located on OL) applied.

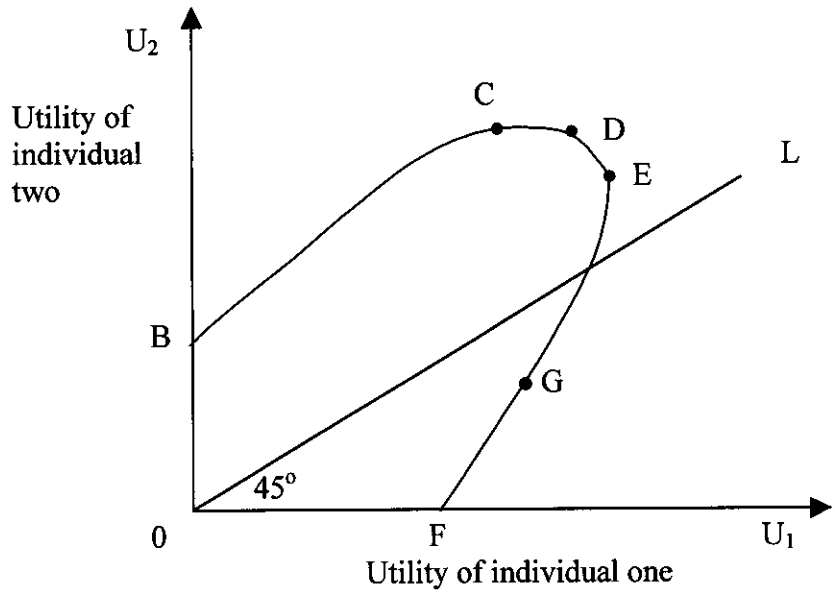

Figure 2 *A utility possibility frontier showing recurving. Gross income Inequality reduces total welfare resulting in all losing.*

Observe that the recurving productivity-depressing effect can be very serious in the long run if it is associated with reduced human capital investment in commodities such as health and education of the poorest members of society, namely the lower skilled and their children. Such an effect is likely to occur as the welfare states are dismantled, as has been

increasingly so in the last couple of decades. Various arguments have been advanced for governments reducing their support for social security. For example, it is sometimes argued that if a country is to remain competitive in a globalising world, it must have a low rate of taxation and therefore the government cannot afford much support for social services. Whether this is so is, however, debatable. For example, the argument only considers the cost side of taxation and ignores the possible economic benefits that can be obtained if public funds are spent wisely. Nevertheless, as discussed later, in a globalising world, fiscal competitiveness between nations can reduce their support for social security efforts and other public programs. This can reduce the social welfare of all the nations involved.

4. MORE ON LABOR MARKET INEQUALITY WITH SOME OBSERVATIONS ON DIFFERENCES IN JOB SECURITY

The Samuelson-Stolper model implicitly assumes that the employment and incomes of individuals depends on traded commodities only – commodities not traded internationally are not considered. For example, if account is only taken of internationally traded commodities, it suggests that the incomes of professionals and highly skilled workers (in short supply internationally) rise as a result of globalisation and those of unskilled workers (in plentiful supply internationally) falls. But the demand for commodities not traded internationally should be considered. The higher income of the 'privileged' group (professionals and skilled persons) may result in their increased demand for non-traded services provided by the group with lower skills. This back surge of demand will help to counteract the fall in income and employment of the latter group. Whether it will more than counteract it will depend on the circumstances. The counter effect will be stronger the larger is the professional/skilled group in relation to the unskilled one, other things being equal.

Naturally, the counter effect will be weakened if 'guest' workers are allowed to provide the non-traded commodities which would otherwise be provided by domestic workers.

It has been claimed, for instance, that immigration of unskilled workers to the United States has reduced working conditions for the least educated workers there (Borjas *et al.*, 1997). In addition, continuing technological progress may reduce the demand for lower skilled workers in developed countries. It may do so (1) through the introduction of labor-saving devices e.g. in the home, (2) by making tradeable some labor-intensive commodities that were not previously tradeable internationally, e.g. some work-processing tasks, and (3) by making it easier to outsource labor-intensive components of productive processes to developing countries (cf. Wood, 1998, p.1466).

5. UNEVEN EMPLOYMENT AND WAGE GAINS WITH GLOBALISATION

In more developed countries, as pointed out above, professional/skilled persons, particularly those in employment, have obtained higher incomes as the process of globalisation has occurred. An important contributor to this has been an increase in the hours of work per week of professional/skilled persons employed. By contrast, the average hours of work of unskilled workers in employment have declined on the whole and there has also been a tendency for their average weekly earnings to decline (cf. Gregory, 2000). In OECD countries, such as Australia, the counter effect mentioned above has not been large enough to compensate for the adverse effect on the non-skilled group of globalisation.

In addition, one observes a dichotomy in the labor market, namely the employment of professional and skilled persons seems relatively inflexible with their average hours of work being flexible, whereas the employment of those with few skills is flexible with their hours of work also subject to flexibility.

One explanation for these differences may be found in new institutional economics and human capital theory. The market transaction costs involved in short-term adjustments of the employment of professional/skilled labor by a firm are likely to be very high compared to that for unskilled labor. Furthermore, and this is partially connected to the previous point, many of the skills acquired by professional/skilled labor in employment tend to be firm-specific. Dismissal of a professional or skilled employee results in a large loss of firm-specific skills or expertise by the business, and when new employees are hired considerable investment is required to re-establish these skills. Thus on-the-job learning combined with the costs of the sifting or sorting process for selecting the best available professionals may mean that a business finds it profitable from a long-term point of view to be rather inflexible in its employment of professional or skilled persons and to vary their hours of work in relation to changing economic conditions, rather than to immediately employ additional staff of this kind.

This is not to say that the employment of professional and skilled persons will not be adjusted in the long run in response to rising demand for the product of a business. However, the increase is likely to involve a 'smoothing' process and is less likely to occur the more uncertain is the future demand for a firm's product. In essence, the employment of new professional/skilled staff involves a significant overhead cost to most businesses. This phenomenon may also help to explain the relatively high unemployment of youth in developed countries compared to persons of more mature age (see Gregory, 1999); and the lower average hours of work of youth compared to those of greater maturity, as well as significant differences in average weekly earnings between younger and more mature persons.

Gregory (2000) has suggested that these phenomena might be explained to some extent by the fact that 'bosses' belong to the older age group and may appropriate

opportunities to earn higher income in their business for themselves. Certainly, this may be so, but the sociological explanation needs also to be supported by explanations routed in 'new' institutional economics, human capital theory and on-the-job learning, as discussed above.

6. THE DILEMMAS OF INTERNATIONAL FISCAL COMPETITIVENESS : REDUCED WELFARE BENEFITS AND PUBLIC SERVICES

There has been widespread support from global economic institutions for the adoption of structural adjustment policies which, amongst other things, encourage a reduction in the size of the public sector. This is achieved to a large extent by reduced public services and reduced provision of social welfare payments. Furthermore, many countries have seen such measures as being beneficial for increasing their international competitiveness. For example, reduced company taxes and other public charges may encourage foreign direct investment in a country, if these measures are not also adopted by competitors. Furthermore, a reduction in the public cost component of exporting goods may have a favourable impact on exports and reduce imports if competing countries do not respond with fiscal concessions.

Fiscal competition can, however, give rise to a prisoners' dilemma problem. Consider a two-country case and the matrix of possibilities shown in Table 1. Each country is assumed to have two alternative strategies, no fiscal concessions and fiscal concessions, represented respectively by strategies α_1 and α_2 for country one and β_1 and β_2 for country two. The payoffs to each country are represented by the cell entries. If both begin from a situation of no fiscal concessions, each has a selfish interest to make such concessions. But as a consequence, a Paretian inferior outcome results which constitutes a Nash equilibrium. All are worse off as a result.

Table 1 A Case in which Fiscal Competitiveness leads to a Paretian Inferior Nash Equilibrium

		Strategies of Country Two	
		β_1	β_2
Strategies of Country One	α_1	(5,5)	(2,8)
	α_2	(8,2)	(4,4)

Note that in the Nash equilibrium shown in Table 1, aggregate economic benefits are lower in the fiscal competition situation than when all parties refrain from such competition. This could occur because, up to a point, public services (e.g. education, infrastructure) may be complementary to private production. Especially in the Paretian suboptimal situation, such services may be reduced to a level which lowers the overall productivity of the economy.

Furthermore, it is also likely that in a fiscal competitive situation social welfare services will be cut, resulting in sharp increases in inequality. For similar reasons to those discussed in relation to Figure 1, social welfare may fall. In addition, it is possible (see Figure 2) that failure of a society to meet the basic needs of a group of its citizens may impose increased costs on it. For example, it can do this by increasing the crime rate, by lowering productivity as a result of reduced healthiness or fitness of citizens, and can result in an increased emphasis on curative medicine rather than preventative approaches to illness. Although the payment of social welfare benefits is often considered solely as a cost to society, their provision can have productive benefits and can avert costs otherwise imposed on society when the welfare of its citizens is grossly neglected.

In relation to fiscal concessions designed to encourage business and foreign direct investment, it is pertinent to note that a conflict may exist between the short run and the long run. Much publicly provided complementary overheads, such as education and

infrastructure, tend to be long-term assets. The effect of a reduction in their provision may not become obvious for some time because it takes a while for the existing stock of some public assets to decline.

In Europe, the launching of the Euro has shed new light on the problem of tax co-ordination. In fact, the conduct of economic policies is confronted with a new dilemma. On the one hand, freedom in capital movements puts pressure on tax rates and therefore on Governments' revenues. Indeed, due to this freedom, multinational firms become more and more sensitive to tax consideration when they decide about their operational locations. This is simply the perverse effect of tax competition. On the other hand, the Amsterdam Stability Pact requires that the public deficit of each European country to remain close to zero. This strains the ability of these countries to reduce tax pressures. One "solution" to this dilemma seems to be to distinguish, for fiscal purposes, between mobile and less mobile factors of production. This deepens the degree of interdependence between tax policies. Changes of the tax rate on mobile resources or tax-bases produce externalities between countries but also have an impact on the less mobile tax-bases or resources which includes unskilled labor in higher income countries (and also sticky activities, final consumption and so on). Therefore, this "solution" could result in a greater economic burden on unskilled workers and greater income inequality because tax competition consists of lower tax rates on mobile factors (in order to attract FDI) and higher tax rates on less mobile factors (in order to maintain Government's revenues).

The following provides an example of the impact of the fiscal competitiveness of Ireland on a German firm's decision on where to locate its new investment. Artur Theis GmbH & Co is a medium-sized company producing packaging for the pharmaceutical industry. It recently decided to establish and open a very modern plant, Theis Eire Teo in Ireland. Its managing director "Jurgen Theis selected Ireland for the new plant because there

he has to tax his profits at just 10% - and not at 60% as in Germany. In addition, the staff costs, not just salaries but also the additional costs [on-costs], are considerably lower in Ireland. As a result he can achieve greater profit margins, build up larger share capital, and thus gain new customers" (Anon, 2000, p.9). Furthermore, "he receives funds from the Irish Settlement Company in order to have his employees trained specifically for his company."

7. CONCLUDING COMMENTS

Globalisation and increased international competitiveness seem to have been embraced as a strategy to enhance economic efficiency. Most economists believe (it seems) that this will increase economic welfare and some appear to believe that it can be expected to result in a 'win-win' situation. But such an outcome seems unlikely in the near future. As argued above, in some countries increased economic efficiency (and economic growth) may be associated with a substantial increase in income inequality which reduces social welfare.

Again, different labor groups may have had divergent economic experiences as a result of the globalisation process. Employed professional/skilled persons experience a rise in average weekly hours of work and income whereas the less skilled in more developed countries experience reduced average weekly hours of work and lower incomes. However, where the latter group is able to supply non-traded commodities in demand by the former group a counter-effect is present; even though in practice it has not been able to offset the decline in demand for unskilled labor in more developed countries as a result of globalisation.

It seems that increased globalisation is, at present, also associated with increased international fiscal competitiveness. It has been argued that this can result in a reduction in global economic welfare. From the above, it is apparent that globalisation, market deregulation and increased competition by no means ensure a 'win-win' economic outcome. Indeed, a very real possibility exists in some circumstances that all parties will loose.

We agree with Feenstra's (1998, pp.47-48) observation that "the position of low-skilled workers in the industrial countries is worsened by the complementary combination of globalisation and new technology". There may also be some merit in his view that "if we want to move beyond the possibility of [potential] Pareto gains to making actual compensation [to those adversely effected by these processes], . . . we should give serious consideration to wage subsidies for low skilled workers" (Feenstra, 1998, p.48). Slaughter (1998, p.1460) points out that another "commonly heard suggestion for remedying rising inequality is to endow less-skilled workers with more skills through education and training." But Slaughter has doubts, based on economic theory, that this will work. In any case, high skills cannot be imparted to all those with low skills because of differences in human abilities and characteristics. Furthermore, all country-specific policy (fiscal) schemes to assist the low-skilled and others disadvantaged by processes generated by globalisation may be stymied by consequential reductions in international competitiveness of individual nations starting on the process. The success of such schemes is likely to depend on a coordinated international effort.

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