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Manuel José Vilares

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Manuel José Vilares
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

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by

Manuel J. Vilares

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Abstract

Unemployment is probably the most important social problem of our times in the rich industrial world. There are 35 million people unemployed in OECD countries (about 8,5%): the situation however differs between the USA and Europe.

In this paper we will discuss the reasons for such a difference. We will argue that the central point is the different response in Europe and the USA to the same shock: that is, a shift in demand from unskilled labour towards more highly skilled labour.

We then analyse two of the most controversial theories concerning the reasons for such a shift in labour demand: the competition from developing countries and technological changes.

Introduction

Unemployment is probably the most important social problem of our times in the rich industrial world. There are 35 million people unemployed in OECD countries (about 8,5%) and in EU countries the situation is even worse with 12% unemployment.

Unemployment is costly in many ways. Apart from the human suffering, the economy loses human resources and tax payers have to bear the cost of unemployment benefit through the welfare system.

In this paper we will discuss why the unemployment situation in the USA is different from that in Europe.

We will then analyse two of the most controversial theories concerning the shift in demand from unskilled towards more skilled jobs: these focus the competition from developing countries and technological changes.

Unemployment, a growing concern

Unemployment has not been always a problem for advanced economies. As a matter of fact, in the period 1964-1970, the unemployment rate was 2,3% in the EU and 4,2% in the USA. In the period 1971-1980 unemployment remained moderate in Europe (4,1%) and lower than in the USA (6,9%).

Only in the 1980's did the unemployment start to become a serious problem in Europe, attaining a level of 10% of the work force, while in the United States it stabilized at around 7%. During the 1990's, this movement has persisted, that is, there has been an increase in unemployment followed by stabilization or even a slight decrease in the USA (Figure 1 and Table 1).

Table 1 - Unemployment Rates in the Last Thirty Years

	1964/70	1971/80	1981/90	1991/94
Europe	2.3	4.1	9.6	9.9
Portugal	2.5	5.1	7.1	5.1
USA	4.2	5.4	7.1	6.7

Source: Economie Européenne, 55, 1993

Moreover, unemployment affects the youth with particular intensity and, in Europe, also the women. On the other hand 42,2% of European unemployment lasts for a year or more. Unemployment in Portugal has the same profile as the EU together, showing an increase in the last years in the proportion of long-term unemployed (Table 3).

Table 2 - The Profile of OECD Unemployment
Unemployment Rates (1993)

	Total working people	Youth	Women	Long-Term Unemployed[1]
EUR12	10.6	20.6	12.2	42.2
Portugal	5.5	12.0	6.5	30.9
Spain[2]	22.4	43.2	28.9	47.4
USA	6.7	13.3	6.5	11.2

Source: The OECD Job Study, Facts, Analysis and Strategies, p.14.

Table 3 - The Structure of the Unemployed Population
Classified According to Lenght of Search and Sex
(Portugal)

	1992		1993		1994	
	M	F,M	M	F,M	M	F,M
Less than 1 year	75.5	74.1	73.1	70.8	67.2	65.9
More than 1 year	23.5	25.9	26.9	29.2	32.8	34.1
TOTAL	100	100	100	100	100	100

This verification raises the following question: Why has the unemployment rate seen a sharp increase in Europe, surpassing in a very clear way that of the USA?

First of all, one should note that unemployment is, by definition, the difference between the labour force and employment. Consequently, an increase in

[1] The "Long-term unemployed" refers to those who are unemployed continuously for a year or more. It is expressed as a share of the total unemployment (1992) percentage.

[2] Spain is shown because it is the country with the highest rate.

unemployment results from an increase in the labour force (i.e. of people who are looking for jobs) bigger than the growth in employment. So, the faster the growth in the labour force, the faster employment must grow simply to hold unemployment steady. In fact, the growth of the labour force (which depends on the growth of the working-age population and on the proportion of this population that wants to work) in the European Union in the 1980's was an average around 0,8% per year, i.e. less than half that in the USA. Therefore, one can state that (when compared with the USA) Europe's big problem in fighting unemployment has been its failure to create jobs.

Employment and the GNP

In the last thirty years, employment has risen 74% in the USA and only 8% in the European Union (Figure 2 and Table 4). But, on the other hand, the GNP has more than doubled in this period both in Europe (+132,5%) and in the USA (+119,6%) (Figure 3). Even in the periods of strong rises in production, as was the case at the end of the 1980's, employment increased very slowly, contrarily to what happened in the USA. How are these differences in performance to be explained?

Table 4 - Employment Growth Rates in the last Thirty Years

	1964/70	1971/80	1981/90	1991/94
Europe	0.2	0.3	0.6	-0.6
Portugal	0.4	-0.3	-0.4	-0.7
USA	2.3	2.0	1.9	0.6

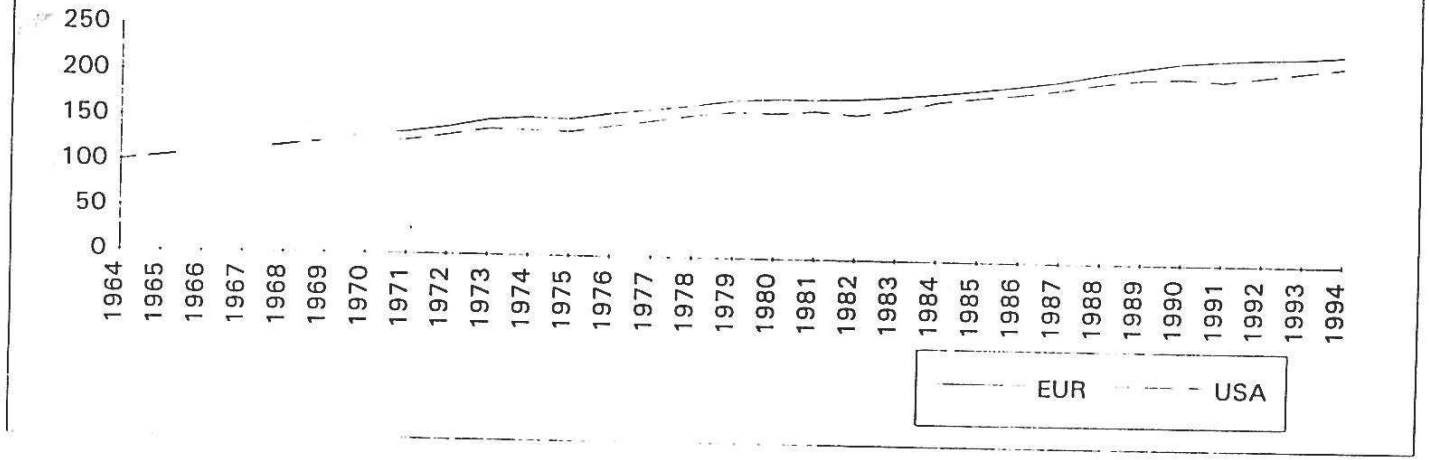
Before going any further it seems useful to distinguish different kinds of unemployment.

Types of Unemployment

Economists usally distinguish two main types of unemployment: cyclical and structural.

Cyclical unemployment can be attributed to a fall in aggregate demand and, consequently, to a recession. This kind of unemployment should disappear during recovery.

FIGURE 3:GNP AT CONSTANT PRICES(1964 = 100)



Structural unemployment persists long after economies recover. There is always a share of unemployment, known as fictional unemployment or natural rate of unemployment, that can never be eliminated completely, since there are always people changing jobs, shifting between companies or moving from one region to another. The issue is that the natural rate has increased in the recent years particularly in Europe, where the unemployment rate has averaged 10% over the past decade, even though economies have been booming for much of that period.

So, changes in structural unemployment correspond, not to changes in aggregated demand as is the case in cyclical unemployment, but to movements in the natural rate itself, which can result from changes in labour market institutions, demographic shifts, wrong skills of the workers and so on. The destrinction between cyclical and structural unemployment is then crucial in order to choose the best policy to attack this social scourge.

There are massive amounts of research on the persistent increase in structural unemployment and on the differences in performance between the USA and European economies. Even though there is no consensus, one can proffer conventional wisdom. Following Krugman (1994), this paper will for the most part restate this conventional explanation.

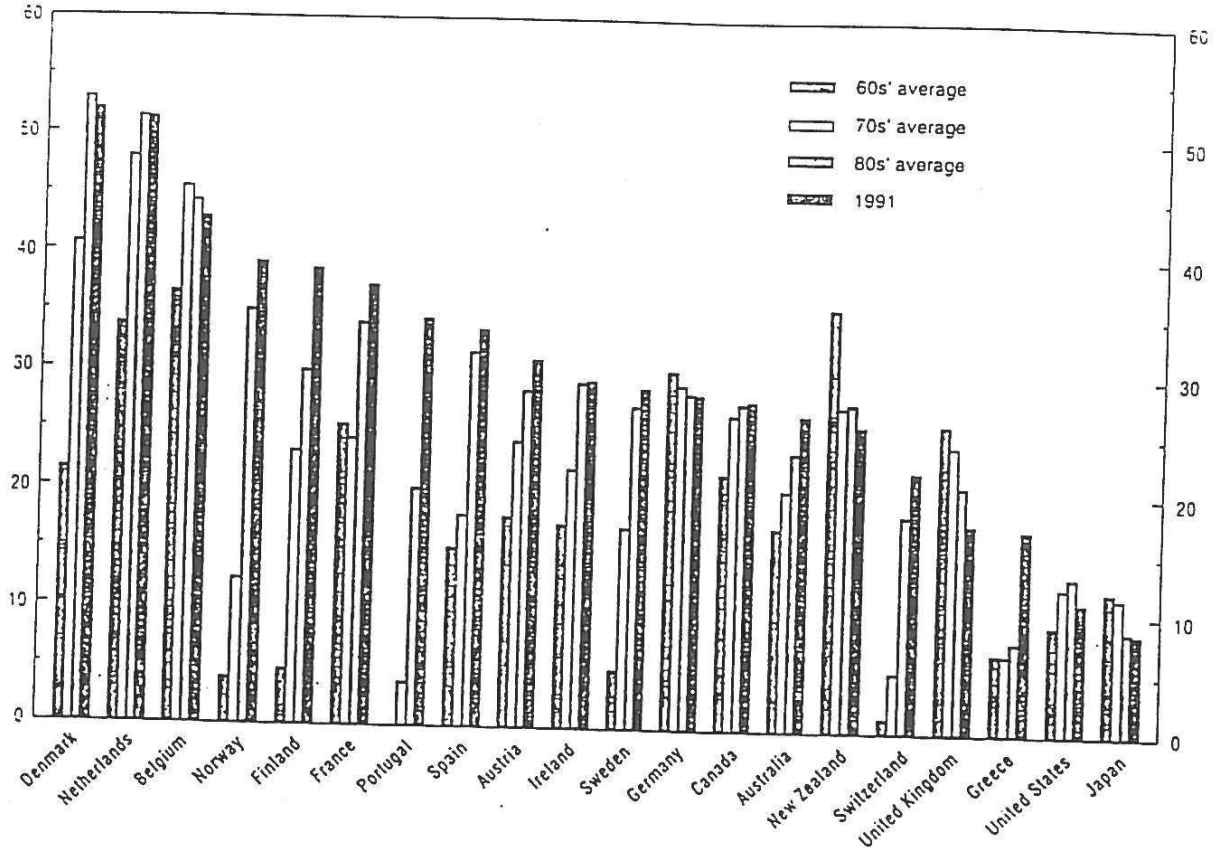
According to this explanation, in the last few decades there has been observed an increasingly sharp fall in the demand for low-skilled workers. This fall in demand has produced two different responses in the USA and Europe: a strong decrease in earnings in the United States and massive unemployment in Europe.

In what follows, we will start by discussing these different responses. Afterwards, we will analyse the reasons for the fall in demand for low-skilled workers.

Employment and the Decrease in Earnings in the USA

The labour market in the USA is very different from those of other developed countries. It is clearly less regulated and supply and demand can compete more freely. The minimum wage is much lower than the average wage and

unions have less power than in Europe. Moreover, the United States tax employment less and provide less support for the unemployed than European nations. Unemployment benefits in the USA are less than in all EU countries. American wage-earners are submitted to a stronger pressure to get a job regardless of the salary than their European colleagues (OECD, 1994, p.24, Fig.16).



1. Replacement rates (i.e. benefits before tax as a percentage of previous earnings before tax) as defined by legislated entitlements averaged across various circumstances in which an unemployed person may be. Countries are ranked in descending order of this average in 1991.

This American system has produced millions of jobs, enabling the great majority of Americans that look for a job to get one. This system has also produced increasing inequality in income; wage differentials have widened and real wages for the low paid have fallen absolutely, resulting a growth in working poverty.

As a matter of fact, in the last twenty years, according to Krugman (1994.a), while the real wages of the low paid have decreased more than 15%, the real income of the top professions, like lawyers, doctors and business executives have increased more than 50%.

As a consequence, there has been an increase in in-work poverty. The proportion of full time employees with an income inferior to the poverty threshold has passed from 12% in 1979 to 18% in 1990, notwithstanding the fact that the average income increased quite significantly (see Figure 4).

The increase in poverty in the 1980's was fed by a large number of employees whose salary was not enough to take them out of poverty.

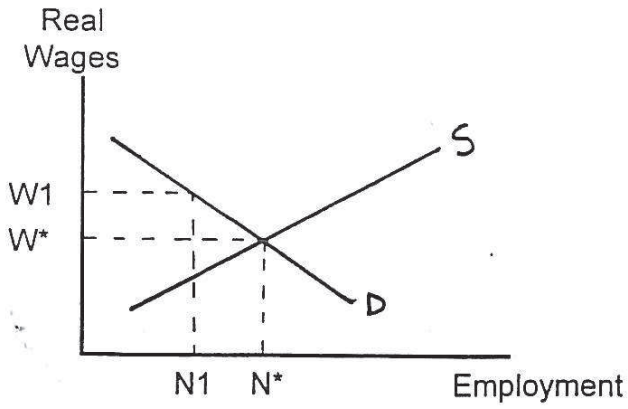
Unemployment and the European Welfare State

There is a certain consensus that one of the main reasons for the massive and growing unemployment in Europe, specially among low-skilled workers, can be found in the welfare state system of most European countries and particularly in the existence of minimum wages, strong trade unions and welfare benefits.

The minimum wages that are set by governments are meant to protect the living standards of workers in low paid jobs. However, the effect of minimum wages can be to eliminate the very job of too many of those they are supposed to help. To illustrate this we can use a very conventional chart to represent the labour market.

The market clears at W*, that is, at that wage the number of workers willing to work is the same as the number of workers that firms want to hire; total employment is N*.

Figure 5: Minimum Wages



Now, suppose that legislation fixes a minimum wage of W1, higher than W*. Firms are willing to hire more workers at a wage below the minimum and there are workers willing to accept lower wages. But the law prevents wages falling below N1 and so prevents the creation of new jobs. Employment will be only N1, inferior to N*.

So, the problem of too high minimum wages can be specially harmful to workers (like young people) who are looking for their first job.

On the other hand, payments to unemployed people and the lenght of eligibility vary widely between countries, being greater in the European Union that the USA.

It is largely accepted that relatively high unemployment benefits tend to increase unemployment among low wage earners, decreasing the incentive to work, and creating in its extreme form what is known as the poverty trap. The poverty trap arises where low wage earners lose some or all of their benefits if their earnings rise. It removes the incentive to work harder and move up the wage ladder.

In order to illustrate the poverty trap let us consider the example given in OECD (1994, p.39) of the hypothetical case of a married man with two children whose income (including social benefits) is $100 per week. He is offered the chance to earn more by working additional hours. But, doing, means that he would lose some of his benefits and, in addition, would have to pay income tax and social security contributions on his extra earnings. For each additional $1 earned, he would have the following costs:

- income tax	25 cents.
- social security contributions	10 cents.
- lost social security benefits	10 cents.
- lost housing benefits	10 cents.
Total	95 cents.

The man would be working extra hours for 5 cents in the dollar, which means he has no incentive to seek income above his basic wage. He is caught in the poverty trap, at an effective marginal rate of 95 per cent, as benefits are reduced and additional earnings are very small.

In summary, all countries have experienced a shift in demand away from unskilled jobs towards more highly skilled jobs.

The answer to this shift has been different according to the wage flexibility. In countries where relative wages have been flexible (as in the case of the USA) the unemployment rate of the unskilled changed little during the 1980's, but wage differentials have widened and in work poverty has increased sharply. On the contrary, in comparatively inflexible Europe, the massive unemployment has not ceased to expand.

So, the question is to know why since the 1980's there has been this shift in demand from unskilled towards more skilled jobs.

In what follows, we will discuss two of the most controversial theories concerning this question

- the competition from developing countries
- technological changes

Competition from Developing Countries

The European Commission's White Paper of 1993, asks why European unemployment remained so high even during the business cycle of 1987 and offers four reasons. The main one is that "other countries are becoming industrialized and competing with us - even in our own markets - at cost levels which we simply cannot match". On the other hand one should quote, as Krugman (1994.a, p.113-14) does, a letter circulated in the last year by Klaus Schwab, president of the World Economic Forum, which hosts the famous Davos Conference. Schwab asked a large number of people to provide input for a document he had been asked to prepare for the UN Secretary General. Traditionally, he wrote, the world was divided into rich countries with high productivity and high wages, and poor countries with low productivity and low wages. But, now, he noted, some countries combine high productivity with low wages. The growing presence of these countries in world markets is leading, Schwab argued, to a massive redeployment of productive sets, which is making it impossible for advanced nations to maintain their standard of living. In other words, competition from the Third World has become a threat, perhaps the main threat to the economies of the First World.

These views, which explicitly blame European unemployment on competition from newly industrialized nations, are easily understood.

Developing countries have three times as many people of working age as the OECD countries and they are willing to accept significantly lower salaries (Table 5). Rising imports from newly-industrialized countries can substitute domestic production, causing unemployment in the rich world. On the other hand, in labour intensive industries, firms have a great incentive to move to a low wage country.

Table 5 - Hourly Wage Costs in US $, 1993

Indonesia	0.24	Singapore	5.12
China	0.44	Spain	11.73
Philippines	0.68	UK	12.37
Poland	1.4	Italy	14.82
Malasia	1.6	France	16.26
Hungary	1.82	USA	16.4
Mexico	2.41	Japan	16.91
Brazil	2.68	Sweden	18.3
Portugal	4.63	Netherlands	19.83
South Korea	4.93	Norway	21.64

A quite sound thematical argumentation about the consequences of trade on unemployment is given by the so-called factor-price equalization theorem. This theorem can be explained as follows. Suppose a country in which skilled labour is relatively abundant (for instance, Japan) increases its trade with another country in which it is relatively scarce (for instance, China). Then Japan will specialize in skill-intensive goods, import labour products and as a consequence, will shift its production towards skill-intensive sectors and away from labour-intensive sectors. The demand for unskilled workers will therefore fall in Japan and so will their wages relative to those of skilled workers. In China, in contrast, the wages of unskilled workers will rise.

So, according to the factor-price equalization theorem, the pay of unskilled workers should decrease and the gap with skilled workers widen, as happened in the USA. In most European countries, minimum wages, strong trade unions and generous social security benefits set a floor beneath wages

and as a result, the fall of unskilled workers has instead caused higher unemployment.

As the theory fits the facts, one can ask if the competition from developing countries has been the main cause of this increasing wage inequality and higher unemployment. Economists disagree.

According to Wood (1994), rising imports from the Third World are the main reasons for the increased inequality and higher unemployment among unskilled workers in the rich world. Wood claims that in the three decades to 1990, trade with the developing countries reduced the demand for unskilled labour in the developed world by no less than 20%. He supplies impartial evidence according to which the bigger the increase in imports, the bigger the drop in manufacturing employment.

Based on these arguments, some people consider competition from low-wage countries "social dumping" because these workers are exploited with low pay and poor working conditions.

Beyond considering hypocritical this concern about low wages in developing countries (it is, in fact, a competitive advantage), several economists disagree with the principle that Third World growth hurts First World prosperity.

First of all, they note that this link relies on the falacious idea that the world's output is fixed, that is, an increase in the output of a developing country will have as a consequence a diminution in output and jobs in rich countries. They emphasize that trade opens up new opportunities and according to the theory of competitive advantage, all countries can gain from with the increase in trade.

A sound justification of these views is given by Krugman (see, for instance Krugman (1994.c). He points out that the empirical evidence does not confirm the view that an increase in trade with the developing countries hurts the employment in the industrialized world.

He points out, in particular, that there has been little shift in the mix of employment toward skill-intensive industries. Moreover, there has been an across-the-board increase in the ratio of skilled to unskilled workers employed

within each industry in spite of the rise in the relative wages of the skilled. In summary, according to Krugman, "the data strongly indicate that if the relative demand for skilled workers has risen, it is because of some common factor that affects all sectors, not because of forces like international trade that change the sectorial mix" (p.36).

Krugman criticizes studies like Wood's (1994). He points out that there has been some confusion in these studies that attempt to measure the impact of trade on income distribution by looking at the quantity of skilled and unskilled labour embodied in trade flows. This procedure cannot be justified in any consistent trade model nor is it possible to determine the direction of the bias.

Moreover, according to Krugman, Wood's study also uses a highly questionable procedure to get a very high labour content in imports and his estimates do not fit in with the direct evidence that there has been little change in the skill intensity of the industry mix.

Krugman concludes (p.36) that the evidence "clearly rejects the view that growing competition from the Third World has been the source either of growing inequality in the United States or of rising unemployment in Europe".

This topic of competition from Third World countries needs further research. In any case it is hard to accept that the main source of unemployment problems in Europe arises in foreign trade with low wage countries. In fact, as an example, Europe's trade with developing countries represented only 12,1% of imports and 13,4% of exports in 1992. These percentages have decreased since 1958 (see table 6). In the case of Portugal, the sharp decrease observed in these percentages is due to the independence of the former African colonies.

On the other hand, (and) concerning foreign investment, Krugman (see IMF, 1995) presents other empirical evidence: "In 1994 - a record for capital flows to developing countries - there was a net capital flow of $60 billions to newly industrializing economies. Compared with net domestic investment in OECD economies ($3,5 trillions) however, this figure pales. Capital outflows on this scale are simply not large enough to significantly influence the amount of capital available to employ workers".

Table 6 - Structure of Foreign Trade

	Imports				Exports			
	EUR12		Portugal		EUR12		Portugal	
	1958	1992	1958	1992	1958	1992	1958	1992
Eur12	35.2	59.3	53.4	73.6	37.2	61.3	38.9	74.8
USA	11.4	7.2	7	3	7.9	6.5	8.3	3.5
Japan	0.7	4.3	0	3.1	0.6	1.8	0.5	0.8
OECD	63.6	82.2	70.4	86.7	64.1	81.9	54.5	89
Dev.Countries	29.5	12.1	27.6	11.7	27.4	13.4	42.3	9
Rest of World	6.9	5.7	2	1.6	8.5	4.7	3.2	2
World	100	100	100	100	100	100	100	100

But, then, what can explain these trends in the demand for skilled workers or - using the expression from Krugman - what is "the common factor that affects all sectors" concerning the increase in the relative demand for skilled workers?

Many economists consider that the growth of earning inequality in the United States and the rise in structural unemployment in Europe has been the result of technological changes that just happen to work against unskilled workers.

Technological Changes

The term technological change is used by economists to mean a shift in the production function i.e. in the relationship between inputs and outputs regardless of the reasons.

According to economic theory, the impact of technology on employment has two opposite effects (see Papaconstinou, 1995). On the one hand, the introduction of new equipment, like computers, reduces the labour needed per unit of production, increasing productivity and eliminating jobs in these sectors. But, on the other hand, this increase in productivity will engender investment in new sectors and new jobs. Information technologies are responsible for the creation of completely new economic activities.

So technology both eliminates jobs (generally lower wage and low productivity jobs) and creates them (high level and better paid). What is the net result?

The history of the industrialized world shows that the introduction of new technologies has in the first phase brought about a net elimination of jobs. However, in the long term, the creation of new jobs has more than compensated for the loss.

In fact, the introduction of new technologies has not hitherto brought about the expected global gains in productivity or the expected supplementary demand for new goods and services.

This is not surprising. As OECD (1994, p.33) remarks "Absorption of important new technologies is typically realized after a long learning phase and major and often difficult organizational change in the work place. It took at least four decades for the full benefits of the electric motor to be realized in manufacturing processes. It is increasingly apparent that the difficulties of diffusing and applying the new information technologies (IT) have been seriously underestimated. The full employment benefits of IT in particular will be realized only when they are fully adapted and integrated. In many cases this requires highly skilled workers".

In the meantime, the transition from the old to new technologies creates mismatches between the skills that people have and those that are needed. The workers who lose their jobs and are not able to take up the new opportunities tend to remain unemployed for long periods unless they accept a lowering in wages.

So, assuming that the labour market continues to work, shortages of skilled labour will exist alongside a growing surplus of unskilled labour.

Some economists are quite pessimistic about the future of this process: they "foresee societies of a few rich and many working or jobless poor. Pockets of crime will follow and would lead to desinvestiment in affected areas" (Global Finance, (1993, p.15)).

What can be done to avoide this situation?

This question will not be discussed in this paper. It has been object of an enormous amount of research. There are even two reports from international organizations - thr OECD (The OECD Jobs Study. Facts, Analysis, Strategies) and (EU Growth, Competitiveness, Employment White Paper) - specially devoted to this challenge, i.e. to overcome both the problem of unemployment and that of poverty in work. The EU "white paper" of 1993 was even presented following an invitation from European Council and it has contributions from all member states.

Conclusion

In recent years, all countries have experienced a shift in demand away from unskilled jobs towards more highly skilled jobs.

The answer to this shift depends on the working of the labour market and of wage flexibility. In countries where unemployment benefits are modest and relative wages have been flexible (has in the case of the USA), the unemployment rate of the unskilled changed little, but wage differentials have widened and in-work poverty has increased sharply. On the contrary, in comparatively inflexible Europe with its considerable welfare systems, massive unemployment has continued to increase.

Among the reasons that can explain the shift in demand from unskilled toward more skilled jobs, we have discussed two of the most controversial ones, competition from developing countries and technological changes.

Views that explicitly blame the Third World for the unemployment problems of the First World economies have been widely disseminated. However, the empirical evidence seems to reject these views.

Technological changes both eliminate jobs (generally lower wage and low productivity jobs) and create jobs (high level and better paid). It is not clear what the net result is, specially in the short term, since the introduction of new technologies has not hitherto brought about the expected global gains of productivity and the expected supplementary demand for new goods and services.

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